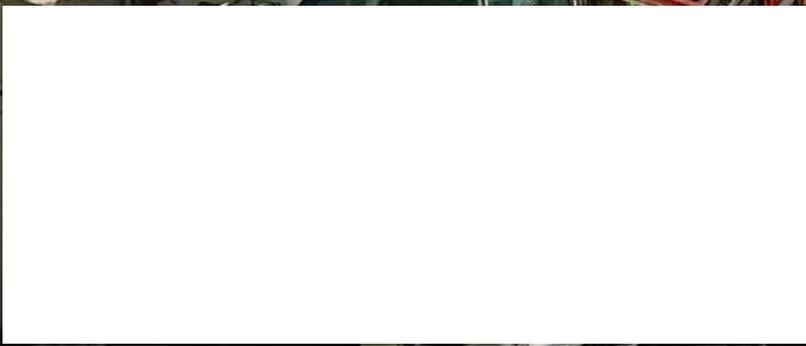


BULLETIN

SMUD DEPLOYS TO PUERTO RICO ON A POWER RESTORATION MISSION





On the cover: A group of SMUD linemen stepped up and took part in a humanitarian mission to travel to hurricane-damaged Puerto Rico to help restore power because most of the one and a half million people there were still in the dark at the beginning of the year despite mutual aid efforts from mainland utilities. All photos provided by SMUD.

Opinions expressed in single articles are not necessarily policies of the Association. For permission to reprint articles, write or call the associate editor.

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Communication Contest to Celebrate Its Silver Anniversary



The annual Excellence in Communication contest plans to celebrate a big anniversary in September—its 25th anniversary! For its silver anniversary, the 2018 Northwest Communications and Energy Innovations Conference (NIC) Planning Committee wants to continue the record-breaking streak for entries submitted, but they need your help and participation.

“The Excellence in Communication Awards are an opportunity for every utility to shine a spotlight on their communication endeavors, their employees, and their utility,” said 2018 NIC Chair Sarah Johnson of Clatskanie PUD. “Last year we had an increase in new conference attendees, and this year I hope we continue that as well as have an increase in new utilities submitting entries into the contest. I love seeing what other utilities are creating, and I love even more to see them being rewarded for their hard work.”

The number to beat from last year is 206 entries from 36 different NWPPA utility and association members. To help facilitate another record-breaking year,

there will again be nine categories:

- 1) Annual Report, 2) Newsletter, 3) Advertising Campaign, 4) Special Publication, 5) Internal Publication, 6) Website, 7) Social Media, 8) Photography, and 9) Wild Card.

Because the People’s Choice Award in photography has become such a hit, the committee has decided to present not one but three awards in that category this year: best utility-related photo of 1) a child, 2) a lineperson, and 3) miscellaneous. All of the photo entries will again be on display at Sunday night’s welcome reception in Coeur d’Alene on September 16 and we will ask all attendees to vote for a favorite—or three favorites this year!

Plan early and plan well for what you enter in the competition because it is never too soon to start looking through last year’s annual reports, photos, and other communication pieces. Set aside what you would like to enter in NWPPA’s 25th Excellence in Communication contest and be ready to submit everything in early April when the 2018 Call for Entries brochure is emailed to

general managers and communicators. Not sure what to enter or what the judges will score highest? Watch NWPPA’s Facebook page (facebook.com/NWPPAssoc) over the next few months for examples of 2017’s first-place entries.

As in years past, all of the winning entries and utilities will be honored at the NIC’s annual banquet, this year being held on September 18 at the Coeur d’Alene Resort in Coeur d’Alene, Idaho. The conference itself will run from September 16-19 at the Coeur d’Alene Resort. Look for more information about the conference in upcoming *Bulletins* and on www.nwppa.org.

We will be emailing the 2018 Call for Entries brochure by April 10, and also posting it on our website; the brochure will have all of the details about this year’s competition, including entry fees, categories, and how to submit your entries. All entries and fees must be postmarked by Friday, June 29. Contact Brenda Dunn at brenda@nwppa.org if you have any questions about the contest or would like a copy of the Call for Entries when it is available. **NWPPA**

The Accounting & Finance Conference Returns!



After more than a 10-year hiatus, the Accounting & Finance Conference will return on June 19-20, 2018, in Spokane, Wash. Brought back at the behest of member requests, this two-day conference has something for everyone: general sessions, learning tracks, and lunch-and-learn sessions.

Want to know what the future holds? The opening general session on June 19 will feature Steve Brown, The Bald Futurist. Brown will share his insights about where the next demands for electric power will come from, how they will transform the world that we live in, and why electric power will be even more central to technological advancement.

“All the big breakthroughs of the 21st century will gobble up power,” he said. “I’ll explain how electricity, artificial intelligence, robots, blockchain networks, and other breakthrough technologies that it enables will be used to totally reimagine the utility industry and the broader business sector. Digital technology has already transformed our world, but we will see more advances in the next decade than we have experienced in the last 50 years.”

After Brown’s presentation, attendees will break into learning tracks that have been specifically geared toward public power utilities (cooperatives, PUDs, and municipals). Learning track topics for co-ops include the balancing act of capital credits and financial accounting. PUD and municipal learning tracks will have topics on municipal bonds, rating agencies, and capital markets update. Cybersecurity and FEMA topics will be discussed at the lunch-and-learn sessions. Anne Falcon of EES Consulting will close out the conference with a discussion on the new large loads facing utilities.

The Accounting and Finance Planning Committee has been instrumental in setting the agenda format and content. Thank you to Tod Young, Flathead Electric Cooperative; Jon Meyer, Benton PUD; Diane Syria, Chelan PUD; Ted Flint, Northern Lights, Inc.; and Rob Carr, Tanner Electric Cooperative.

For more information, please visit www.nwppa.org. For questions about the conference, please contact Jenny Keesey at jenny@nwppa.org. **NWPPA**

Penry Named as New Instructor for NWPPA’s Accounting & Finance Program



This year, John Penry of Penry Consulting joins us to bring a new look to a couple of accounting topics previously offered at NWPPA; in October, Penry will teach *Budget Basics for Utilities* and *Evaluating Capital Projects*.

Penry has 17 years of utility experience, including nine years at Salt River Project, a large water and public power company in Phoenix, Ariz. While at SRP, he had assignments in Strategic Planning, Resource Planning, Customer Billing & Competitive Provider Services, and Supply & Trading. His tasks included business process improvement, analytics, and program management. At the same time, he taught microeconomics at the college level for five years.

He has also worked with CFC for a time where he created and managed the Cooperative Financial Professional Certificate program, conducted macroeconomic analysis, and ad hoc financial and economic analysis. Since starting his own consulting firm, Penry has consulted with electric and agricultural cooperatives; and has created and delivered programs for directors and staff.

He holds a master’s degree in strategic planning from the University of Arizona, Eller College of Management; a master’s degree in international finance from Thunderbird School of Global Management; and a bachelor’s degree from Auburn University. Prior to attending graduate school, he worked in the consumer electronics industry for four years.

Registration for *Budget Basics for Utilities* and *Evaluating Capital Projects* will soon open at www.nwppa.org. If you have any questions about these or other accounting and finance classes offered through NWPPA, please contact Jenny Keesey at jenny@nwppa.org. **NWPPA**

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Illuminating the Future: Shining a Light to Lead the Way!



Ever hear of an LuminAid? It's a solar-powered light used to light the way when things look dark. It can shine a light to read, to cook, or provide a little comfort in the dark. There is a lot going on in the industry and some of it can be a little opaque. Come join us at our 78th Annual Conference & Membership Meeting in Boise, Idaho, May 20–23, to see for yourself what a little light can do! Watch your mail for a full program and agenda; but until that arrives, we've provided a sneak preview of some of the session topics and speakers.

Keynote by Mark Mills, a Tech Pundit and Optimist

Our opening keynote presentation starts with a bit of this and a bit of that, quickly moving into where we are today and an array of possibilities from an optimist's point of view. Come hear a think-tank junkie guaranteed to get your attention—whether you agree or not with his prognostications. His provocative perspective will give you something to talk about in your own board room and utility.

Partnering for the Future—Adrian Tuck of Tendril

People have choices and they choose their partners. We want consumers to choose public power, which may mean thinking differently about the services utilities provide. Imagine the ability to meet and personally orchestrate your members' needs. Now imagine your partnership with your members/consumers from basic engagement to active participation to whole home management by turning data into insights and insights into action. There are tools and partners in the marketplace today

that can illuminate your next consumer engagement move.

A Battery Sans Wind or Solar—Carlos Gonzales of Tesla

They did it in Vermont. Green Mountain Power offers home batteries for \$15 a month with no solar, no wind; just a battery for \$15 a month. Hear Gonzales talk about the value proposition to the utility and to the consumer; and how one utility-battery partnership is shining a different light on home storage.

Gas to Grid: Moving Today and Tomorrow—Arlen Orchard of SMUD, Tommy Wolff of Columbia Basin Electric Cooperative, and Garrett Fitzgerald of Rocky Mountain Institute

The changing road of transportation continues to evolve from the gas station to the charging station, from mobility transformation all in one panel to feasibility, planning, and installing. This panel will shine some headlights and highlights on what you can do at your utility in the movement from gas to grid.

More Powerful Together Update

Last year we talked about the possibilities, this year it's time for show and tell. Member utilities are demonstrating just how powerful they can be with the materials developed in partnership with NWPPA and Ruralite Services. Local was a hit, Innovative was a double hit, and we expect Expert to be over the top! We think we see some award winners out there—see if you agree.

Public Power Lite—Gary Saleba of EES Consulting and Randy Howard of NCPA

Community choice aggregators may not be your full-service utilities, but they are certainly creating some competition

through consumer responsiveness for green and lean. A utility with no poles and wires, but certainly lots of buying power; could this California choice model move into other states? Understand how this model works, and the risks and rewards of providing energy to a CCA.

Resilience Is More Than a 10-Letter Word—Rob Roys of ABB

There is reliability and there is resilience. While the terms are often used interchangeably, they mean very different things. Most of us have a pretty good record for reliability, but we are often not tested on our resilience. Planning your system for resilience can mean the difference in hours or days when the lights go out. Consumers expect their utilities to be better, smarter, and faster in responding to lights out; here you'll hear some ways to do just that!

CEO Panel—Clay Fitch of Wells Rural Electric, Kevin Nordt of Grant County PUD, Les Penning of Oregon Trail Electric Cooperative, and John Roukema of Silicon Valley Power

Always filled with interesting perspectives, Public Power Council Executive Director Scott Corwin will moderate this CEO panel as they share the innovative and bright approaches they are using to face the challenges of the day.

We hope to see you at our 78th Annual Conference & Membership Meeting, May 20–23, at the Boise Centre. You can register online at www.nwppa.org today. **NWPPA**

Are You Registered for the 2018 Engineering & Operations Conference and Trade Show?



POWERING FORWARD IN A SEA OF CHANGE

A key reason for many to attend the E&O is the opportunity to network and learn from their colleagues. Attendees of the conference and trade show are from your neighboring utilities and vendors; they are local to you and share some of the same challenges and opportunities that face you and your organization. This is an opportunity to hear from, and share work successes and challenges with, your colleagues on a variety of topics through moderated roundtables, educational sessions, and trade show sessions. The NWPPA E&O is a unique experience, one that you can't get from large national conferences, because of the focus on opportunities and challenges found among NWPPA member utilities in the West.

Another highlight of the conference is the outstanding number of high-quality and industry-relevant vendors that attend the trade show. This is a high point of the conference and one of the reasons that members continue to attend this conference. With nearly 200 vendors exhibiting in the trade show, you can visit with them about their latest and best products and services, and talk with them about ideas to help you with your projects and the opportunities and challenges at your utility.

We can't wait to see you in Tacoma, April 10–12! Register today at www.nwppa.org/eo. **NWPPA**

For a complete list of vendors and a detailed conference schedule, visit www.nwppa.org/eo.

A Look Back at Public Power

50 YEARS AGO – 1968

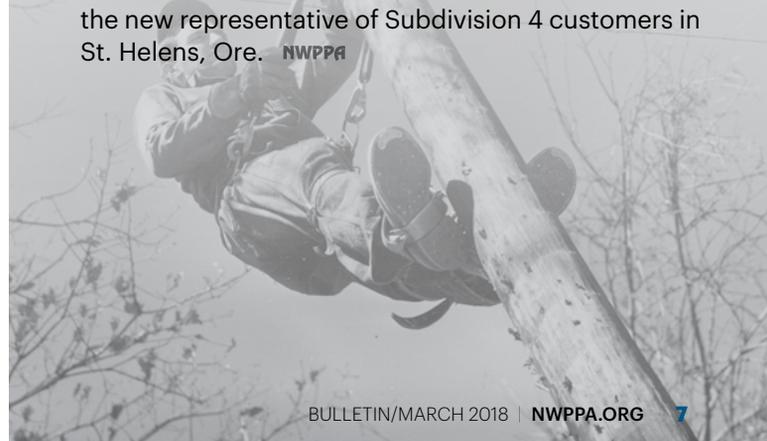
Central Lincoln PUD's IBM 360 computer began calculating heat loss for customers (Ore.) ... Clark County PUD celebrated its 20th anniversary (Wash.) ... At its annual meeting, Missoula Electric Cooperative announced that 121 new member-consumers began receiving service (Mont.) ... Snohomish PUD Lineman Henry Cook received the Governor's Safety Award for saving the life of a coworker, Foreman John Shannon (Wash.) ... Park Electric Cooperative sponsored an essay contest for high school students (Mont.) ... The BPA-Idaho Power Company wheeling agreement to supply Southern Idaho with Columbia River power was signed on March 29.

25 YEARS AGO – 1993

Robert D. Pierce joined Clearwater Power Company as its new director of marketing and member services (Idaho) ... Grays Harbor PUD encouraged customers to take its Energy Pledge to help make Grays Harbor County an energy efficient community (Wash.) ... At its annual meeting, Flathead Electric Cooperative announced that 1992 had been the largest growth year ever in the history of the utility (Mont.) ... Underwater concrete repair on spillway surfaces continued at Grant PUD's Priest Rapids and Wanapum Dams (Wash.) ... William G. Council was named managing director of the Washington Public Power Supply System.

5 YEARS AGO – 2013

Mason County PUD 3 General Manager Wyla Wood retired on March 31 after over 30 years with the utility (Wash.) ... Emerald People's Utility District Board of Directors approved an average 3-percent rate increase (Ore.) ... The Sacramento Municipal Utility District hosted the fifth annual Youth Energy Summit training event, emphasizing the creation of green businesses, for about 100 participating students who teamed up to create green for-profit or nonprofit businesses (Calif.) ... Columbia River People's Utility District Board of Directors welcomed Jake Carter as the new representative of Subdivision 4 customers in St. Helens, Ore. **NWPPA**



APRIL, MAY, AND JUNE 2018

Please visit www.nwppa.org to view the full course descriptions for these and other courses.

ENVIRONMENTAL TASK FORCE MEETING

Who Should Attend: Utility environmental professionals (new and experienced), government agency staff, vendors and anyone who is tasked with or interested in environmental issues, regulatory compliance, or mitigation in the environmental arena of electric utilities.

April 9, 2018—Tacoma, Wash.

NEW! E&O PRECONFERENCE CLASS: FUTURE-PROOF YOUR BUSINESS—THRIVE IN TIMES OF CHANGE

Who Should Attend: Utility and business individuals, leaders, and teams.

April 9, 2018—Tacoma, Wash.

NEW! ONLINE — ENGINEERING WEBINAR SERIES: TRANSFORMER BANKING

Who Should Attend: Engineering personnel and others who would benefit from an understanding of current electric utility engineering principles and practices.

April 10, 2018—Online

ENGINEERING & OPERATIONS CONFERENCE AND TRADE SHOW

Who Should Attend: Electric utility engineering and operations personnel, as well as those in IT, safety, purchasing, environmental, accounting, communications, or any area where a more in-depth knowledge of engineering and operations would be beneficial. For more information, see page 7.

April 10–12, 2018—Tacoma, Wash.

COMMUNICATION ESSENTIALS FOR SUCCESS

Who Should Attend: Anyone who needs to communicate effectively with others in their utility as well as with customers and members.

April 11–12, 2018—Spokane, Wash.

ONLINE — MANAGING ANGRY CUSTOMERS

Who Should Attend: Anyone who wants to increase his or her communication skills to be more effective working with both internal and external customers.

April 17, 2018—Online

LINEMAN SKILLS SERIES: AC SYSTEM TROUBLESHOOTING

Who Should Attend: Line and other operations personnel, such as metering, service, engineering, and other individuals who require understanding of AC theory and how it relates to equipment used to troubleshoot problems.

April 18, 2018—Seattle, Wash.

SENIOR LEADERSHIP SKILLS SERIES SESSION 2: LEAD YOUR TEAMS

Who Should Attend: General managers, directors, and experienced team leaders.

April 18–19, 2018—Salt Lake City, Utah

MANAGING CHANGE AND TRANSITION

Who Should Attend: General managers, managers, supervisors, and anyone who has taken Leadership Skills.

April 18–19, 2018—Vancouver, Wash.

QUALIFIED WORKER TRAINING—OSHA 1910.269

Who Should Attend: Individuals who do not hold an electrical journeyman certificate, but as a part of their duties must enter or open secured areas such as substations, pad mounted transformers, switch gear, vaults, and metering cabinets.

April 19, 2018—Seattle, Wash.

LEADERSHIP SKILLS #4: HR BASICS & BUILDING A MORE EFFECTIVE WORKPLACE

Who Should Attend: Supervisors and managers, and those employees who will be transitioning to a supervisor or manager role in the near future.

April 25–26, 2018—Bend, Ore.

ONLINE — EMPLOYMENT LAW WEBINAR SERIES: ALL THREE WEBINARS

Who Should Attend: Managers, supervisors, and HR staff.

May 1–22, 2018—Online

ONLINE — EMPLOYMENT LAW WEBINAR SERIES: ADA - STRESS, ANXIETY, AND MENTAL DISORDERS AS DISABILITIES

Who Should Attend: Managers, supervisors, and HR staff.

May 1, 2018—Online

ONLINE — EMPLOYMENT LAW WEBINAR SERIES: ACCEPTING EVERY HUMAN'S NATURE AT WORK

Who Should Attend: Managers, supervisors, and HR staff.

May 15, 2018—Online

ONLINE — EMPLOYMENT LAW WEBINAR SERIES: MANAGING ABSENCES, FAMILY LEAVE, AND REASONABLE ACCOMMODATIONS

Who Should Attend: Managers, supervisors, and HR staff.

May 22, 2018—Online

ADMINISTRATIVE PROFESSIONALS WORKSHOP

Who Should Attend: Administrative assistants, executive assistants, and clerks to the board.

May 2–3, 2018—Tacoma, Wash.

SUBSTATION SERIES: SUBSTATION OVERVIEW & INSPECTIONS

Who Should Attend: Line and substation personnel, distribution engineers, and supervisors who have responsibility for transmission and distribution substations.

May 8, 2018—Richland, Wash.

ONLINE — ENGINEERING WEBINAR SERIES: TRENDS IN FUSE SAVINGS

Who Should Attend: Engineering personnel and others who would benefit from an understanding of current electric utility engineering principles and practices.

May 8, 2018—Online

CUSTOMER RELATIONS: BUILDING RAPPORT

Who Should Attend: All employees who want to improve their internal and external customer relationships.

May 8–9, 2018—Vancouver, Wash.

SUBSTATION SERIES: PRINT READING AND ELECTRICAL CIRCUIT TROUBLESHOOTING TECHNIQUES

Who Should Attend: Linemen, substation personnel, and distribution engineers who have responsibility for the operation and maintenance of distribution and transmission substations.

May 9–10, 2018—Richland, Wash.

MANAGING CONTRACT LABOR AND LINE CREWS IN OPERATIONS

Who Should Attend: Operations managers, line superintendents, supervisors, and those who have responsibility for contract management and management of contractors in operations at a utility.

May 11, 2018—Richland, Wash.

ELECTRIC UTILITY SYSTEM OPERATIONS

Who Should Attend: Any electric utility industry employee (utility or vendor) whose job performance will benefit from a basic understanding of the operations side of the utility business.

May 15–16, 2018—Missoula, Mont.

LEADERSHIP SKILLS #3: PERSONALITIES AND ATTITUDES IN THE WORKPLACE

Who Should Attend: People managers with formalized leadership responsibilities for getting work done through others and who have already completed Leadership Skills #1.

May 16–17, 2018—Kennewick, Wash.

LINEMAN SKILLS SERIES: AC TRANSFORMERS, ADVANCED THEORY, AND PRACTICAL APPLICATION

Who Should Attend: Journeyman linemen, foremen/supervisors, engineers, and those involved in planning, scheduling, and engineering operations for a utility.

May 16–17, 2018—Bend, Ore.

ANNUAL CONFERENCE & MEMBERSHIP MEETING

Who Should Attend: Utility managers, assistant managers, senior staff, power supply managers, utility board, commissioners/council members, associate members, and trade association heads. For more information, see page 6.

May 20–23, 2018—Boise, Idaho

continued



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TRAINING OPPORTUNITIES

ANNUAL MEETING PRECONFERENCE CLASS: 955.1 YOUR BOARD'S CULTURE—ITS IMPACT ON EFFECTIVENESS

Who Should Attend: Any board member, commissioner, or general manager interested in better understanding board culture and its impact on effectiveness.

May 21, 2018—Boise, Idaho

ANNUAL MEETING PRECONFERENCE CLASS: INTRODUCTION TO ROBERT'S RULES OF ORDER

Who Should Attend: Policymakers, general managers, clerks to the board, executive secretaries, administrative assistants, and any utility employee participating in board or commission meetings.

May 21, 2018—Boise, Idaho

NEW! INFLUENCING OTHERS: MASTERING HUMAN DYNAMICS

Who Should Attend: Anyone who engages in frequent human interactions, such as utility and community leaders, customer service representatives, human resources professionals, and field employees.

May 23–24, 2018—Vancouver, Wash.

STAKING TECHNICIAN CERTIFICATION PROGRAM: SIZING TRANSFORMERS AND CONDUCTORS

Who Should Attend: Staking technicians.

June 4, 2018—Spokane, Wash.

STAKING TECHNICIAN CERTIFICATION PROGRAM: UNIQUE STRUCTURES

Who Should Attend: Staking technicians.

June 5, 2018—Spokane, Wash.

ELECTRIC UTILITY SYSTEM OPERATIONS

Who Should Attend: Any electric utility industry employee (utility or vendor) whose job performance will benefit from a basic understanding of the operations side of the utility business, including engineering, operations, safety, purchasing, information technology, regulatory and rates, customer service, public relations, legal, and accounting; as well as utility commissioners and board members.

June 5–6, 2018—Vancouver, Wash.

FOREMAN LEADERSHIP ACCELERATED PROGRAM: PART 2

Who Should Attend: Foremen and crew leaders who have participated in Foreman Leadership Accelerated Program: Part 1.

June 5–7, 2018—Great Falls, Mont.

LEADERSHIP SKILLS #2: LEADERSHIP CHALLENGES

Who Should Attend: Supervisors and managers, and employees who will be transitioning to a supervisory or managerial role in the future.

June 6–7, 2018—Whitefish, Mont.

STAKING TECHNICIAN CERTIFICATION PROGRAM: OVERHEAD/POLE-LINE STRUCTURE DESIGN AND LAYOUT

Who Should Attend: Staking technicians and engineers.

June 6–8, 2018—Spokane, Wash.

LABOR AND EMPLOYEE RELATIONS GROUP MEMBER MEETING

Who Should Attend: Members of the NWPPA Labor and Employee Relations Group: general managers, labor relations managers, operations managers, and human resource professionals.

June 11–12, 2018—Spokane, Wash.

ELECTRIC DISTRIBUTION SYSTEMS

Who Should Attend: Engineers, line workers, substation workers, apprentices, and support staff that have direct responsibility for the construction, operation, and maintenance of the utility's distribution system. **Prerequisite:** It is highly recommended that students complete *Electric Utility System Operations* before attending this class. Those who do not must have substantial experience in the basics of electric systems and utility operations.

June 12–13, 2018—Tacoma, Wash.

ENTERPRISE RISK MANAGEMENT: ADDING VALUE TO YOUR ORGANIZATION

Who Should Attend: Chief financial officers, senior-level accounting staff, auditors, general managers/CEOs, policymakers, and legal counsel.

June 13–14, 2018—Spokane, Wash.

SENIOR LEADERSHIP SKILLS SERIES SESSION 3: COACHING

Who Should Attend: General managers, directors, and experienced leaders of teams.

June 13–14, 2018—Hood River, Ore.

ONLINE — ENGINEERING WEBINAR SERIES: APPLICATION AND USE OF FAULT INDICATORS

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June 19, 2018—Online

NEW! ACCOUNTING & FINANCE CONFERENCE

Who Should Attend: CFOs, general managers, all levels of accounting staff, and utility employees who work closely with the accounting department. For more information, see page 4.

June 19–20, 2018—Spokane, Wash.

LINEMAN SKILLS SERIES: REGULATORS AND CAPACITORS—POWER QUALITY FOR LINEMEN

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June 21, 2018—Richland, Wash. **NWPPA**

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IT'S TIME TO RETHINK RECs

By Annie Pantzke

Green pricing programs can often collect dust on the shelves of a utility as just another mandated program with little payback. That was the case at Tacoma Power with Evergreen Options when Power Management Manager Clay Norris arrived in 2015. The program, which ran itself for years, was outdated.

"It worked," said Norris, "but its potential wasn't being harnessed."

Before coming to Tacoma Power, Norris worked for Eugene Water and Electric Board as the division director of power resources. He said his mind was changed about REC programs when he joined Greenpower, EWEB's voluntary program that allows customers to support clean, sustainable energy and encourage renewable energy projects in their local community.

"It wasn't some placeholder program," Norris said. "Greenpower was engaging. I remember schools competing for grant awards, and kids petitioning their parents to sign up and vote for their specific initiative. Customers were eager to be a part of something bigger, and I can feel that same drive starting in Tacoma, too."

Public utilities in the Pacific Northwest may overlook REC programs because their power portfolios are already green, but

"there's a growing number of customers who want options," Norris said. "They've grown up in communities that care about the environment, it's engrained in them. It's not going to go away; it's only going to get stronger."

With Greenpower in his rearview mirror, Norris was ready to show the direct benefits of Evergreen Options to Tacoma Power's 175,000 customers.

"I asked our Market Development team to see where they could take it," he explained. "I wanted to make Evergreen Options more tangible. If I learned anything from Greenpower, it's that results with a local component drives engagement."

"That was easier said than done," joked Market Development Manager Dan Drennan. "If other utilities are going to learn from this, they need to know it's much bigger than they realize." It was an organizational effort from the top down, said Drennan. "Prepare for all teams to be engaged from legal to marketing, conservation and management. Everyone needs to participate," he said.

Drennan and his team worked Evergreen Options until it became evergreen opportunities. Months of research and dozens of team meetings culminated into three pitches for Power Management on what could be done to revive Tacoma Power's REC program.

With Norris' backing, Power Management chose the most aggressive option—a complete overhaul of the program's marketing strategy that includes incentives for participation and these other changes:

- Evergreen Options' structure changed from a voluntary fee to a rate rider. Instead of a small line item at the bottom of their bill, customers participating in Evergreen Options now see their contribution totals in bold near the top with their monthly charges. It's a small step that keeps the program in line with new state marketing mandates and costs the utility nothing.
- Evergreen Options underwent a full rebranding, which included window clings for all active members to show their commitment to renewable energy. It cost \$2,000 to create and distribute the promotional items.
- A renewable energy grant program was created and advertised. Members of Evergreen Options were informed that they would soon have the opportunity to "choose the change within their community."

Tacoma Power announced it would invest in up to two renewable energy projects annually, selected by Evergreen Option participants, worth up to \$50,000 each. The projects, which are grant-based, are open to local tax-exempt organizations, academic institutions, and public agencies. Funding for the grants is covered by the monthly financial delta of the Evergreen Options program. Ongoing management and maintenance of the projects is the responsibility of the grant recipients.

"We brainstormed ideas that would give existing customers a sense of exclusivity for their participation in Evergreen Options and increase enrollment," said Trenea Colby, Market Development program manager. "We decided to let them be the voice for change. To let them choose and ultimately hang their hats on a renewable energy project within Tacoma."

Proposals from the community were judged internally on five categories: project readiness; costs and funding; innovations; community benefits; and overall proposal. Two review groups were created: one to look at feasibility, another to look at the applicant and overall proposal. Projects needed to show how they would generate their own electricity from renewable sources

such as solar, wind, and geothermal. The key to making the program self-sufficient, Norris said, was making membership in Evergreen Options a requirement of the application process.

Some of the potential projects could be a school solar project, a non-profit solar project (e.g., food bank, Habitat for Humanity, Tacoma Housing Authority), and even solar being one component of a larger initiative that would incorporate energy storage or electric vehicle charging.

"It worked better than we anticipated," said Norris. "Not only did we see the engagement we were hoping for by current customers, but participation in the program increased by 15 percent in only three months."

Norris said untapped community stakeholders were identified during the application process, giving Tacoma Power's marketing team another avenue to engage and highlight key community organizations.

"If they weren't chosen, they would still be winners and look like winners to their community," he said.

The review groups narrowed down the applicant pool to two finalists: Point Defiance Zoo & Aquarium, and University of Washington Tacoma.

Point Defiance Zoo & Aquarium proposed installing 86 solar energy modules on top of the Asian Forest Sanctuary, the overnight home to a number of species in the zoo's collection.

"The zoo's mission promotes conservation, sustainability, innovation, and community to create a cleaner, greener, more sustainable way of living," said the proposal. "With 750,000 visitors every year, the zoo believes this project will have broad-reaching impact on the education and implementation of solar technology."

The University of Washington Tacoma proposed installing a solar PV array on the roof of the Court 17 Apartments (student housing). This project was said to support the university's mission by "serving low-income students by reducing the cost of energy bills at the Court 17 Student Housing Apartments and providing education and stewardship of precious resources."

As promised, Tacoma Power put the final decision before Evergreen Options' members. The Point Defiance Zoo & Aquarium garnered nearly 75 percent of the votes, becoming the first recipient of Evergreen Options' \$50,000 grant.



Pictured is one of the zoo's Sumatran Tigers. The grant will go towards solar panels atop the roof of the Asian Sanctuary, where the tigers are housed. Photo credit: Point Defiance Zoo & Aquarium.

Publicity garnered during the voting process and selection planted Evergreen Options as a sustainable member-led program.

"I'm impressed at how the team took an OK program and turned it into a program that actively engages customers and supports renewable resources while benefitting nonprofit agencies in our community," said Tacoma Power Superintendent Chris Robinson. "It doesn't get much better than that." **NWPPA**

Annie Pantzke is a community relations officer at Tacoma Public Utilities. She can be reached at either (253) 502-8117 or apantzke@ci.tacoma.wa.us.

RISK INTERDEPENDENCIES:

Utility Risks Are Not Isolated Events

By Julie Ryan

Mark Twain once wrote, “Necessity is the mother of taking risks.” While he was probably not referring to the electric industry at the time, this observation rings very true for our sector. Electricity is a necessary service in our communities, but it is not without risks. Utility managers identify, manage, and mitigate those risks as part of running the utility. But how often do we sit down and map the risks? If we did, we could think more proactively about how to address or change the risks. And for the risks that we cannot control, we could better prepare for the risks.

To do this well, utility leaders must consider how risks are related to better understand the interdependency of risks. A typical “risk inventory” is a list of risks that wise and experienced minds within the utility develop. Often the next step is to quantify the probability of the risks occurring and the severity of the risks or their impact. But after completing an initial inventory, then it is important to consider risk interdependencies. This is because risks do not occur in isolation, but instead, are much more complex. Exploring the interdependencies helps us see how the risks interact. From here, we have better insight to their cumulative impact.

The theme that “no man is an island” is true of most U.S. and Canadian utilities. Utilities operate in an integrated grid with other utilities and power generators. When we look at risks that can occur within the utility, we need to consider whether this also impacts our neighboring utilities. If yes, then this leads to different mitigation than if we are addressing risks unique to our organization. For example, if our utility is concerned about having the right workforce in place, possibly because of pending retirements or new technology requiring different skillsets and training, chances are that your neighboring

utilities face a similar challenge. So, our mitigation plan must take that into consideration (and raiding their ranks might not be a very sustainable plan). Or if a utility is concerned about a major transmission outage, chances are the outage will have ripple effects across the grid. How will we recover from the event when others likewise may be impacted? Perhaps the best mitigation is a regional solution. Or if a utility is concerned about major storm impact, most likely the neighboring utilities will be as well. In this case, our mitigation must look outside our immediate region.

Another method to assess risk interdependencies is to ask, “What is the flow of events?” Consider a pebble thrown into a pond, causing widening ripples of other risks. In other words, a risk event can create multiple risks. And depending upon how an event plays out, there can be risks that occur afterward. Risks that happen from one risk event are often called “additive risks;” a risk that is triggered sequentially after the initial risk is a “cascading risk.”

For example, consider the case where a utility identifies a dam failure in its risk inventory. While this is appropriately categorized as a major risk, there is complexity that must be examined. This risk event could have several additive risks, such as flooding and loss of hydro generation. Then there could be cascading risks following the two additive risks. Cascading risks from the flooding could be safety risk, property damage risk, compliance risk, and liability risk. The cascading risks to the loss of hydro generation could be large construction cost risk; cash flow challenges related to loss of sales revenue or the higher cost of replacement power cost; and increasing customer rates due to the lost resource. Both the flooding and loss of generation have a cascading reputation risk within the community and in the sector if not managed well.

Lastly, let’s remember “The Perfect Storm.” You may recall the book written by Sebastian Junger about the collision of three storm systems off the New England coast in late October 1991 and its catastrophic impact on the fishing boat Andrea Gail. While many people think of a hundred-year event as something impossible to scope, the electric sector does consider these events in its planning. Therefore, the final stage of risk event mapping is to ask, “What would be a perfect storm for our utility? What are the two or three colliding events that would be devastating?” The hard part of the discussion is contemplating what might happen. Once that is out on the table, it is possible to proactively prepare a response plan if the event occurred.

The reason for examining risk interdependencies is to ensure we give appropriate weight to certain risks. If we look at risks in isolation, we may underestimate the true impact or develop a suboptimal mitigation strategy. By looking holistically at the risk chain, we can develop more robust mitigation.

NWPPA

Julie Ryan is the managing partner at Aether Advisors LLC, advising clients on strategy and risk management. She is also director of the Utility Management Certificate program at Willamette University in Portland, Ore., and an instructor for NWPPA. She can be contacted at jryan@aetheradvisors.com or (206) 329-0424.

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Path to Sustainability: Technology and the Modern Utility

By Peter Londa

Today's utility industry is changing rapidly. Energy efficiency, renewable and distributed energy resources, new energy markets, and high demand costs are putting great pressure on utilities to find ways to be sustainable.

A case in point: in 2016, MGM Resorts International announced it would no longer purchase electricity from Nevada Power, the Silver State's largest utility. Instead, the casino conglomerate would purchase power on open wholesale markets to better capture the value that increased energy control and distributed resources offered. Despite an \$87 million exit fee to Nevada One, MGM expects a payback within six to seven years, thanks to evolving consumer demands and new technical realities for the electric grid. In one fell swoop, a major

utility lost nearly 5 percent of its annual sales due to changing market expectations.

In order to build a sustainable business model in a rapidly evolving landscape, utilities must embrace technology to enable a more open, digital distribution system. Technology for the modern utility will offer expanded grid infrastructure services, improved control to consumers, and a marketplace for forward-thinking, cost-effective solutions. Absent embracing new innovations and evolving customer expectations, old-thinking utilities expose themselves to a reduction in revenue to cover fixed costs as larger and wealthier customers move off-grid through the purchase and deployment of new, energy efficiency technology solutions.

Yet, how will traditional utilities select and invest in these innovations while faced with increasing fixed costs and the need to do more with less? To tap into emerging innovations, many utilities will need to turn to technological solutions that provide access to real-time data, flexibility, and control, which empowers their core civic function of supplying critical energy resources to local customers. Utilities must offer increased functionality to customers by extending energy metering capabilities and real-time data analytics further along their value chain and closer to the consumer. Utilities will likely not build out these solutions themselves, and instead seek to access a network of solution providers with proven products that utilities can deploy immediately, scale to their market, and customize to their needs—just as telecommunication providers like Verizon and AT&T partner with technology providers like Apple and Samsung.

Next-generation advanced metering infrastructure combining high data capacity, low latency, and intelligent distributed computing endpoints deployed at the edge of a utility's grid will become a necessary component for energy systems. As the utility industry moves away from limited one-way communication platforms or rudimentary two-way systems that centered on only accessing meter data, advanced communication platforms will enable the utility to access data and provide more granular control of connected devices deployed throughout the grid.

Technology can offer a utility—and their customers—insights into specific devices such

as smart thermostats, electric vehicles, or localized battery storage to make smarter decisions. The inclusion of customer engagement portals will enable a utility's customers to see their energy usage and set customizable alerts. By tapping into both hardware and software at the utility and customer levels, these technologies can be layered on top of one another to create a strong and transparent network of how energy flows between the traditional electric grid and the growing ecosystem of distributed resources.

Beyond eliminating manual meter reads and disconnects, utilities and municipalities will be able to offer additional services to communities, such as networked LED streetlights or automated parking space monitoring. The advanced visibility and the overlaid controls provided to utilities will have major implications regarding how the grid is monitored and controlled.

As energy competition from distributed energy resources, reduced consumption, and increasing peak demand rates impact a utility's ongoing sustainability, utilities must look toward the future and proactively leverage smart grid technologies to improve their overall efficiency, reliability, and sustainability.

NWPPA

Peter Londa is a seasoned smart grid technology executive and currently serves as Tantalus' president, CEO, and board member. He can be reached at plonda@tantalus.com. This article was originally published in Electric Light & Power.

Douglas PUD Honors Dan Gerber

Douglas County PUD (East Wenatchee, Wash.) Commissioners **Ronald E Skagen**, **Molly Simpson**, and **Aaron J. Viebrock** awarded Power Operations Programmer **Dan Gerber** with his 20-year service award during the February 12 commission meeting.

Commissioner Skagen thanked Gerber on behalf of the citizens of Douglas County for his years of service. Gerber thanked the commission and said, “It’s gone fast. It’s been a blessing.”



Commissioner Skagen, Commissioner Viebrock, Dan Gerber, and Commissioner Simpson.

Correction:

Last month, we incorrectly published that Douglas County PUD Work Order Clerk **Sandy Petersen** received her 25-year service award; Petersen actually received her 20-year award and Senior Resource Planner **Debbie Kenny** received the 25-year service award. Our apologies for the error. **NWPPA**

Lewis County Announces Rate Increase

At the February 6 meeting of Lewis County PUD’s (Chehalis, Wash.) commissioners, the commissioners approved a rate increase effective March 1. The daily charge will not increase; the energy, or kilowatt-hour charge, will increase 4 percent across all rate classes.

Factors for the rate increase include: wholesale power price increases from Bonneville Power Administration; steadily increasing compliance requirements with legislative mandates and voter-approved initiatives such as Initiative 937, the Energy Independence Act; and increases in operating costs to ensure a reliable electrical system. **NWPPA**

Umatilla Moves Forward on Wheatridge Project

On the heels of a favorable ruling from a federal agency, Umatilla Electric Cooperative (Ore.) is taking the steps necessary to provide transmission services to the Wheatridge Wind Energy Facility.

The first step is preparing a conditional-use permit application to build, operate, and maintain a 230-kilovolt transmission line that would connect the project to a Bonneville Power Administration substation at Boardman, said **Robert Echenrode**, UEC’s CEO and general manager.

On January 18, the Federal Energy Regulatory Commission confirmed UEC as the sole provider of transmission services to the 500-megawatt project.

UEC had been working with Wheatridge and other local, state, and federal stakeholders for several years to plan the transmission line, but progress paused for a year while legal challenges worked their way through state and federal regulatory agencies.

The proposed transmission line is a key element of a green energy corridor that would connect wind and solar projects in southern Morrow County to the northwest energy grid at Boardman. Combining energy projects in one corridor along or near Bombing Range Road would have several advantages, Echenrode said. **NWPPA**

Pend Oreille PUD Ends Litigation with PNC

Pend Oreille County PUD (Newport, Wash.) and Ponderay Newsprint Company have agreed to end all litigation between them. The resolution of these matters allows PNC to continue its focus on producing high-quality newsprint and providing jobs to approximately 140 employees in the region. The PUD can likewise focus on its hydroelectric dam improvement project and serving its customers.

The agreement also promotes future collaboration between PNC and the PUD by providing PNC with long-term energy cost incentives, and the PUD with support for marketing its power resources to additional consumers.

“We are happy to have resolved the litigation on mutually agreeable terms and look forward to a stronger working relationship with the District,” said **Myron Johnson**, PNC’s general manager.

The PUD’s general manager, **Colin Willenbrock**, is also pleased that the litigation has concluded. “This conclusion helps keep the PUD’s largest customer operating in the county and allows the PUD to make decisions that will ensure the rest of the general service customers continue to receive power at the lowest possible cost.”

“I’m very pleased with the outcome,” said **Dan Peterson**, the PUD’s board president. “This is a reasonable win-win for everyone.” **NWPPA**

SMUD Engineer Wins EPRI Tech Award

Dagoberto Calamateo, a SMUD (Sacramento, Calif.) research engineer, has been selected to receive a prestigious Technology Transfer Award from the Electric Power Research Institute for his achievements in research and development.

SMUD's Calamateo, a research engineer from the electric utility's Energy Strategy Research and Development Department, helped implement the solar photovoltaic adoption forecasting tool and worked with EPRI to implement the tool, also known as PVAT, to generate PV adoption forecasts according to user-defined scenarios that establish the costs, benefits, and emissions profile of PV adoption. The tool started generating PV adoption forecasts in 2017 and will continue until 2026. By using the tool, a utility can make better decisions about how to deploy and manage PV on its system to ensure the highest level of reliability.

"The SMUD Board realizes that investing in R&D projects that support its core and key values is a major factor in SMUD's long-term competitiveness and ability to deliver innovative products and services. I am honored to receive the award," said Calamateo. **NWPPA**



(L-R) SMUD's Dagoberto Calamateo receives EPRI's Technology Transfer Award from Andrew Phillips, EPRI's vice president of Transmission and Distribution Infrastructure.

SCL Opens Fast-Charging EV Stations

Saying Seattle will continue to lead in the fight to address climate change and in clean energy innovation, Beacon Hill Mayor **Jenny A. Durkan** put into service Seattle City Light's (Wash.) first two fast-charging stations for electric vehicles on January 30. Mayor Durkan also said City will install up to 18 more charging stations at 1-15 sites in Seattle by year's end.

"Cities don't have the luxury of climate denial and cannot wait for leaders in the other Washington to embrace science. The effect of inaction is already at our doorstep," said Mayor Durkan.

Light-duty vehicles—including cars, trucks, and buses—account for two-thirds of Seattle's climate-changing carbon pollution. To combat those sources of carbon emissions, the City has a goal of increasing electric light-duty ownership to 30 percent by 2030 while rapidly transitioning the municipal fleet to hybrid and electric vehicles, further advancing the city toward its climate goal.

The new charging stations were installed as part of the City's Drive Clean Seattle initiative. **NWPPA**

OTEC Welcomes New Employees

There are plenty of new faces roaming the halls of Oregon Trail Electric Cooperative (Baker City, Ore.). During January, OTEC welcomed three new employees (**Matt Haggerty**, **Andrew Cutler**, and **Todd Hendrickson**) to the fold.

Haggerty is OTEC's new Northern Division superintendent and is based out of the cooperative's La Grande office. He did a line apprenticeship in construction, then took a position at Grant County PUD where he worked as a lineman, foreman, and as a supervising foreman. Haggerty jumped at the opportunity to take a position in La Grande where he was born and raised.

"I am very excited to be back in the Grande Ronde Valley," said Haggerty.

Hendrickson, who is also a native of La Grande, is a new energy program representative for the Baker City and La Grande districts. His experience includes more than 12 years working with an independent contractor in Washington state, restoring and revitalizing commercial and residential properties to include upgrades to new energy efficient standards. Hendrickson is fluent in Portuguese, and obtained an EMT certificate from Chemeketa Community College in Salem, Ore.

"We are extremely grateful to be back in La Grande and able to come work for OTEC," said Hendrickson.

Cutler, the new manager of communications and public relations, spent five years with *The Observer* in La Grande, where he was the managing editor/publisher; he has more than 17 years of experience in the newspaper industry. Cutler holds a Bachelor of Arts degree in multidisciplinary studies from Boise State University, and an associate's degree from Treasure Valley Community College in Ontario, Ore.

"I'm very happy to be taking on this new challenge," Cutler said. "And I'm very humbled that OTEC took a chance on someone who is coming into this job with a limited background in the electric cooperative industry." **NWPPA**

AMP Offers Cash Rebates for EV Chargers

Alameda Municipal Power (Calif.) has launched a new program that provides local residents, businesses, and public agencies with substantial rebates on electric vehicle chargers. Residents can now apply for a rebate of up to \$500 for a Level 2 home electric vehicle charger; non-residential applicants will be eligible for a rebate of up to \$3,000 on Level 2 chargers for the workplace or for their customers.

"In addition to our current electric vehicle discount program, we are excited to provide this new incentive to support customers who want to drive electric in the future," AMP General Manager **Nico Procos** said. "Transitioning from gas to electric vehicles is a key way that our community can fight climate change."

The rebate applies to purchases of Level 2 chargers dating back to October 16, 2017. AMP is funding the rebates with California low carbon fuel standard credit funds. **NWPPA**

Vera Announces Two New Board Members

S pokane Valley's Vera Water and Power (Wash.) has announced two new members of its board of directors, as well as the 2018 officers and current board members.

Vera Water and Power's two new board members are **Diana Wilhite** and **Bryan St. Clair**. Both will be contributing a wealth of leadership and business acumen to the district.

Wilhite, Vera's newest board member, is a small business owner and Vera Water and Power customer. She previously served on a public power board of directors when she was a customer of Inland Power and Light and understands how non-profit, community-owned utilities like Vera operate.

St. Clair brings 35 years of experience in the water, sewer, and power business to the Vera board. Over the years, he has worked across Washington state in both surface water and well water systems. He is currently the Modern Electric Water Company Water superintendent and a Vera Water and Power customer.

The 2018 Vera Water and Power Board is comprised of Chair **David Peterson**, Vice Chair **St. Clair**, **Floyd Schmedding**, **Wilhite**, and **Steve Wulf**. *NWPPA*

Jay Hanson Earns National Certification

F all River Electric Cooperative (Ashton, Idaho) board member and past board president, **Jay Hanson**, recently earned the prestigious Director Gold Credential Certification from the National Rural Electric Cooperative Association. Obtaining this certificate requires prior achievement of both the Credentialed Cooperative Director and Board Leadership Certificate as well as additional credits earned from NRECA's continuing education program. This is the highest level of certification NRECA offers to cooperative board members. This achievement highlights Fall River's commitment to education and remaining informed in an industry which is experiencing significant fundamental changes.

Hanson grew up on a farm near Shelley, Idaho, where he helped raise crops and livestock. That background led him to earn a Bachelor of Science degree in agriculture from the University of Idaho. His professional career included 33 years as an agricultural extension agent, not only for the University of Idaho but also the University of Wyoming. He was the first agent to ever serve two counties in two different states. He also served as president of the Idaho Association of County Agricultural Agents, interim superintendent of the Tetonia, Idaho-based ag research center, and president of the board of the Eastern Idaho Agricultural Hall of Fame.

Hanson has served on the Fall River Electric Board for over 12 years. He is also a board representative for the National Rural Utilities Cooperative Finance Corporation based in Virginia. *NWPPA*

Salem Electric GM Retires, Promotions Announced

O n February 7, 2018, **Terry M. Kelly**, Salem Electric (Ore.) general manager since 2014, retired. His leadership, commitment to community, and friendly, engaging personality will be greatly missed by the cooperative.

Kelly came to Salem Electric in 1983 as an energy analyst and was promoted to member services manager in 1997. It was in this role that he expanded community involvement creating more opportunities for employees to participate in the Salem Electric community. He became the face of Salem Electric serving on numerous industry and community organizations and boards. He has a passion for the co-op community and is a servant leader.

"I just like to be involved and try to make a difference. I believe we need to be the change we want to see," said Kelly.

Throughout his career, Kelly was recognized for his volunteerism and commitment to the public power industry. He has received the City of Salem Distinguished Service Award, the Vern Miller Key Citizen Award, the NWPPA Lacy Peoples Award, and the ORECA Rural Electrification and Distinguished Service award.

Tony Schacher is now Salem Electric's general manager. Schacher joined Salem Electric as an engineer in 2007 after having worked at Central Lincoln PUD from 2004. He was promoted to engineering and operations manager in 2012.

JB Phillips was promoted to engineering and operations manager, replacing Schacher.

"It's going to be a tough act to follow, but I have a great group of people that I've worked closely with over the years to make the transition easier," said Phillips. "I'm thankful for this opportunity and I am committed to the continued success of Salem Electric."

Phillips graduated from Oregon State University with a degree in electrical engineering. After graduation, he was hired as an engineer for a paper manufacturing company, and then joined Salem Electric in 2011 as an engineer II. *NWPPA*



Terry M. Kelly



Tony Schacher



JB Phillips

We Remember

Ralph Edward Williams



The former general manager of United Electric Co-op, **Ralph Edward Williams**, died on February 19 in Mesquite, Nev. He was 72 years old.

Williams was born in Burley, Idaho, on September 19, 1945, the only child of Cecil Edward Williams and Constance Ruth Eames Williams. He attended Malta Elementary and graduated from Raft River High School in 1963, and subsequently attended Ricks College for one year. He was a member of the Idaho Army National Guard for 10 years. On July 6, 1968, Williams married Virginia Rae Galliher, and they would have celebrated their 50th anniversary this July.

In December 1968, he went to work for Raft River Rural Electric in Malta. He worked for 17 years on the line crew and 10 years in the office. In December 1996, he was hired as general manager of Unity Light & Power in Burley. Williams later helped merge Unity Light & Power and Rupert Rural Electric Company into what is now known as United Electric Cooperative, Inc. in Heyburn, Idaho. He continued another 16 years at United Electric before his retirement in 2010.

He is survived by his wife, Virginia; children, Mamie Lou (and Ron) Thurston-Steg, Wade Edward (and Camille) Williams, and Drew Cecil Williams; and grandchildren, Style Thurston, Brett Williams, Lexie Williams, Brody Williams, and Breckin Williams. **NWPPA**

Martin Charles Smith



Former Municipal Light & Power employee **Martin Charles Smith** passed away on February 18. He was 51 years old.

Born in Anchorage, Alaska, Smith was a 1985 West Anchorage High School graduate. He earned an electrical engineering degree from the University of Alaska Fairbanks in 1991. In 2005, he started working at Municipal Light & Power. While at ML&P, he was awarded the IEEE Outstanding Engineer Award for his contributions to the field and was the chairman of the 2013 NWPPA/APA Alaska Electric Utility Conference. Smith left ML&P in 2015 but continued to consult for the company while working at Electrical Power Systems.

He was involved as coach and league president with the Anchorage West Little League. His interest in baseball started when he played in the Spenard Little League and continued through adulthood as he watched all three of his children play for Anchorage West.

He is survived by his wife of 25 years, Shannon; children, Emilee, Sean, and Ian; his mother, Heather; and his brothers, Dan (and Brenda) and Bryan (and Jennifer); six nieces and nephews; and many friends and extended family members. Smith was preceded in death by his father, Clyde Smith. **NWPPA**

Charles LeRoy Farrell



Former Tillamook PUD employee **Charles LeRoy Farrell** passed away on October 15, 2017. He was 88 years old.

Farrell was born on November 29, 1929, in Pendleton, Ore., to Myles and Josephine (Hansen) Farrell. He attended school at Pendleton High School, played baseball, and was a member of the band. He graduated in 1948 and joined the Coast Guard, where he was stationed at Garibaldi, Ore. There he met and married the love of his life, Chesterlea Illingworth, on August 3, 1952, upon his discharge from the Coast Guard.

In 1953, Farrell went to work for Tillamook PUD on the brushing crew; he then applied and was accepted for his lineman apprenticeship. He served many positions at Tillamook during his 34 years at the PUD, including superintendent, which was his position when he retired on February 2, 1992. Upon his retirement, he ran for the TPUD Board and was elected. He also served on the Tillamook Water Commission.

He is survived by his wife of 65 years, Chesterlea; sons, Kevin (and Jenel) Farrell and Colin (and Kim) Farrell; daughters, Cheryl (and Kelly) Hallowell and Charleen Farrell; five grandchildren; and 10 great-grandchildren. **NWPPA**

Ethan Rocke Joins Ruralite Team

Ruralite is pleased to introduce the newest addition to its team of talented editors, **Ethan Rocke**. Rocke joins Ruralite Services, Inc. as an assistant editor with a diverse background in multimedia journalism. He brings skills they will gladly tap to meet the evolving needs of those they serve.



Rocke is a *New York Times* best-selling author, and an award-winning photographer and filmmaker. After serving as an U.S. Army infantryman for three years, he later joined the Marine Corps as a combat correspondent. For 10 years he served as a “storyteller of Marines,” working as a writer, photojournalist, editor, and film consultant. He is also co-author of *The Last Punisher: A SEAL Team THREE Sniper’s True Account of the Battle of Ramadi*.

Honorably discharged from the Marines in 2011, Rocke earned a B.S. in photojournalism from Syracuse University and a M.S. in multimedia journalism from the University of Oregon.

Why Ruralite? For Rocke it was simple: the chance to tell stories and serve others.

“For as long as I can remember, I’ve been passionate about storytelling and its power to connect people and inspire us to imagine and achieve great things,” said Rocke. “Author Jonathan Gottschall says story ‘is perhaps the main cohering force in human life.’ I think he’s right, and so I take very seriously my commitment to the people and communities I serve as a storyteller.”

As part of his new mission at Ruralite, Rocke will offer utilities we serve his editing expertise, multimedia storytelling, and social media support. He’ll help guide the Social Media Support Program and be part of Ruralite’s team effort to enrich the ways we communicate, story tell, and share information on behalf of utilities.

Ruralite Services Inc. is a communications cooperative for all consumer-owned utilities. Since 1954, its members have pooled resources to create powerful and affordable communications tools, including magazines, newsletters, reports, calendars, directories, websites, and social media support. For more information, visit www.ruraliteservices.org. **NWPPA**



EnerSys® Releases PowerSafe® ESG Batteries

EnerSys, the global leader in stored energy solutions for industrial applications, has introduced the PowerSafe ESG battery, designed to provide 185 to 960 amp-hours of capacity range to handle the challenging load profiles and service conditions of utility applications.

The configuration of five multi-cell four-volt units (185, 234, 281, 354, and 418Ah) reduces the footprint of the PowerSafe® ESG battery to enable minimal occupation of floor space. Individual terminal posts on each cell facilitate integration of battery monitoring and test equipment used in routine maintenance and inspection. The Slide-Lock™ post seal accommodates natural plate growth over time for maximum reliability and reduced maintenance. Additionally, the tongue-and-groove jar-to-cover seal provides a robust airtight seal.

“PowerSafe® ESG batteries are engineered with proprietary materials and design features to deliver the performance and service life utility applications require,” said **George Brendahl**, utilities product manager, EnerSys. “Their thick grids ensure long-duration discharge performance and extended life.”

EnerSys, the global leader in stored energy solutions for industrial applications, manufactures and distributes reserve power and motive power batteries, battery chargers, power equipment, battery accessories, and outdoor equipment enclosure solutions to customers worldwide. For more information, visit www.enersys.com. **NWPPA**

OSI Appoints Shams as Newest VP

Open Systems International, Inc. announced that **Farshid Shams** has joined OSI’s executive team as the new vice president of the company’s Oil & Gas and Pipelines business unit. Shams recently served as the vice president of Oil & Gas, North America for Schneider Electric. In his new role at OSI, he will oversee the company’s operations in the global oil and gas market, and will participate in strategic planning as a key member of the corporate executive team.

Shams has a mechanical engineering degree and earned his M.B.A. at HEC Paris, Europe’s top-rated business school. He has worked in various positions for TOTAL, the French oil and gas conglomerate, on large LNG and gas exploration projects. Shams then joined Schneider Electric in Paris as the regional business director of oil and gas, where he oversaw the development of the company’s oil and gas business in Europe, the Middle East, and Africa. He was later promoted to vice president of Oil & Gas, North America, based in Houston, Texas.

Open Systems International (www.osii.com) provides open, state-of-the-art, and high-performance automation solutions to utilities worldwide. **NWPPA**

Council Announces 2018 Chair, Vice Chair

The Northwest Power and Conservation Council has elected Idaho member **Jim Yost** as chair and Montana member **Jennifer Anders** as vice chair for 2018.

Yost worked for a time for the Northwest Power and Planning Council before being appointed by Governor **Phil Batt** as his natural resources senior policy advisor. He was retained in that position by Governors **Dirk Kempthorne** and **James Risch**, and then appointed to the Power and Conservation Council by Governor **Butch Otter** in 2007.

Anders was appointed to the Council in January 2013 by Governor **Steve Bullock**. She worked closely with Gov. Bullock during his 2009-2012 tenure as Montana's attorney general. She has spent her entire professional career in public service, working for four separate attorneys general in both the civil and criminal arenas.

The Council has eight members (two each from Idaho, Oregon, Montana, and Washington) appointed by governors.

The Northwest Power & Conservation Council's mission is to ensure, with public participation, an affordable and reliable energy system while enhancing fish and wildlife in the Columbia River Basin. More information can be found at www.nwcouncil.org. **NWPPA**

OSHA, DOT Approve Cablecure 732

Novinium[®], leader in the rehabilitation of underground electrical cables, now offers a superior cable-rejuvenation fluid approved by both OSHA and the Department of Transportation. Novinium's Cablecure[®] 732 fluid delivers three different life-extension materials designed to repair water-tree damage in electrical cables. The fluid also provides five other materials to upgrade the cable with elements found in today's new cable. Cablecure 732 is used on cables up to 250 MCM and the Cablecure 733 is used on larger-diameter cables where conductor temperatures may exceed 60°C. Both fluids are approved for use by OSHA and the DOT, as the fluids contain no known carcinogens or reproductive toxins.

Created as a viable alternative to expensive replacement of damaged underground electrical cables, Novinium is working closely with utilities in the U.S. and Canada to future-proof and repair failures within their electrical infrastructure. Rejuvenation of cable with the improved Cablecure product comes with a 40-year warranty.

Novinium is today's only full-service cable rehabilitation technology company. Headquartered in the Seattle area, Novinium was founded in 2003 by **Glen Bertini**, the inventor and expert in cable rejuvenation technology. Further information is available at novinium.com. **NWPPA**

Terex Employees Assist Texas Youth

Terex Utilities team members from across the nation traveled to Houston, Texas, for the company's annual sales and service training meeting in January. While in Texas, 85 employees teamed up with the company's San Antonio-based service center to get involved in two local community organizations that serve at-risk youth.

For one of the projects, 16 bikes were purchased and assembled for Therapeutic Family Life, a foster-care agency. The other project involved packing 100 personal hygiene kits for Boysville Inc., a home for boys and girls who cannot remain in their own home due to abuse, neglect, abandonment, or family disruption.

"We became aware of Therapeutic Family Life because our technician, **Billie Alaquinez**, has fostered more than 20 children and adopted six through TFL. And Boysville is a well-known charitable organization in the San Antonio area located just a short distance from our branch," said **Daniel Horton**, branch manager.

According to Boysville, children arrive at all hours of the day often with only the clothes they are wearing. Clothes, hygiene items, and toys are some of the basic everyday things that make a big difference to children in need. Less than 24 hours after delivering the kits, **McKenzie Radzik**, Boysville Development associate, said they were already going out to kids.

Making citizenship a priority at the annual sales meeting has become a tradition at Terex Utilities. "We are proud to support local organizations in communities where Terex team members live and work," said **Jim Lohan**, VP of Sales and Marketing.

Terex Corporation is a global manufacturer of lifting and material processing products and services delivering lifecycle solutions that maximize customer return on investment. More information about Terex is available at www.Terex.com, www.linkedin.com/company/terex, and www.facebook.com/Terex-Corporation. **NWPPA**



(L-R) Dan Horton, Terex Utilities; Cynthia Herrera, TFL; Melissa Garcia, TFL; Sue Perkins, Terex Utilities; and Billie Alaquinez, Terex Utilities



(L-R) Dan Horton and Sue Perkins delivered 100 hygiene kits to Boysville in January.

President's Budget and Infrastructure Plan Gets Big Reaction, Little Traction

By Elizabeth K. Whitney

On February 12, President Trump released his FY19 budget request along with a much-anticipated infrastructure package. While the budget is an annual exercise by which the administration kicks off Congressional work on federal spending, which often bears little resemblance to the president's request, there is even less certainty regarding action on an infrastructure bill.

Of immediate interest to not-for-profit utilities, the FY19 budget revives the previous year's call for divesting the power marketing administrations' transmission assets. This time, both documents double down on this proposal, adding Tennessee Valley Authority assets to the "for sale" pile and calling for the PMAs to charge market rates.

While this proposal didn't come as a surprise to lawmakers (some in the Pacific Northwest had already sent a preemptive letter noting that such a suggestion would be "dead on arrival"), it does raise questions about why the Administration would press for this policy in the face of clear Congressional objection. And the biggest question of all is, what comes next?

Budget cuts trim energy, environment accounts

The FY19 budget continues the Trump Administration's focus on early-stage research at the Department of Energy as opposed to commercialization, and most accounts see their budgets cut. A notable exception, however, is \$54 million included for competitive grants that may be awarded to small modular reactor (SMR projects).

The DOE would get a new office of Cybersecurity, Energy Security, and Emergency Response, to focus on national security and infrastructure security. That office and others would join together on a new "grid modernization initiative" with \$180 million in funding.

The Department of the Interior request would see a 16-percent cut overall, but the budget would fund 100 percent of the 10-year average for wild-fire suppression. It also calls for forest management reforms.

Some important programs would be eliminated completely, including the Advanced Research Projects Agency – Energy and the loan guarantee program, as well as the Low Income Home Energy Assistance Program.

Infrastructure plan includes little for energy

At 55 pages, the "legislative outline for rebuilding infrastructure" is quite a bit more substantive than the proposal leaked to the public a few weeks before the budget came out. However, the leaked document left many thinking energy infrastructure could still be a pillar of the proposal. Instead, very little attention is devoted to energy infrastructure at all, aside from the lines devoted to PMA divestiture.

Energy infrastructure would qualify for grants from a new Transformative Projects Program, and Private Activity Bonds would be applicable to hydroelectric generating facilities. Pipelines would see eased permitting as well.

Despite the lack of word count on energy infrastructure, lawmakers in committees of jurisdiction over energy appear certain that any infrastructure bill will include items related to water and power.

Energy and Commerce Chairman Greg Walden (R-Ore.), for example, said his panel stands "ready to work with anyone and everyone to...improve energy distribution to bring prices down for consumers." Along with his statement, he listed dozens of infrastructure bills passed by the Committee for potential inclusion in an infrastructure bill, including the Hydropower Policy Modernization Act (McMorris Rodgers) and the Nuclear Waste Policy Amendments Act (Shimkus). The Senate Energy

and Natural Resources Committee has held hearings calling for investment in energy infrastructure, including passage of the broad energy bill S. 1460 as an infrastructure bill.

Plans and processes guide next steps

Nevertheless, neither the budget nor the infrastructure proposal has gotten off to a roaring start. Congress is still working on last year's appropriations, having extended current levels several times before finally agreeing to increase the budget caps put in place by a previous agreement.

The President's Budget begins the process anew, but lawmakers typically react coolly to it, reminding constituents that Congress, not the president, sets spending levels. One exception is the PMA divestiture proposals, which members of Congress oppose with particular intensity. Once the appropriations subcommittees begin crafting FY19 spending bills, typically in late spring, those measures are likely to be specifically rejected again.

The path forward on an infrastructure bill is less certain. Questions about how to pay for new spending, concerns about environmental impacts, and partisan tensions have all slowed the proposal's momentum on the Hill.

The 115th Congress doesn't have a strong track record of passing bipartisan legislation, especially without a deadline to drive action. It is possible that the infrastructure bill fails to gain momentum or to get off the ground; however, customers are not waiting around to miss an opportunity to advocate for energy provisions—or to oppose misguided PMA proposals—in any legislation that might move forward.

NWPPA

Elizabeth K. Whitney is managing principal at Meguire Whitney LLC, NWPPA's Washington, D.C., consulting firm. She can be reached at elizabeth@meguirewhitney.com.

As the Reliability Coordinator Role Shifts in the Western Interconnection, WECC Will Continue to Push for Reliability

By Jim Robb



The beginning of 2018 brought news regarding impending changes to the reliability coordination activities in the West and many are curious about the Western Electricity Coordinating Council's role related to these changes. Both WECC and the North American Electric Reliability Corporation have very specific authorities regarding reliability coordination, namely that entities are properly registered; reliability coordinator (RC) functions are certified; and all transmission operators (TOPs) and balancing authorities (BAs) have identified their respective reliability coordinator. While commercial considerations will play a part in BA, TOP, and RC decision making throughout the transition to multiple RCs, we intend to remain focused on maintaining the reliability of the Interconnection. Furthermore, we are mindful of the creation of seams between the RCs. We are engaged in discussions with the prospective RCs on how they will ensure their operations account for these seams issues and maintain reliability across the Interconnection.

As the RC situation evolves, I would like to emphasize the importance of strong BA and TOP operating practices, beyond mere compliance with the

Reliability Standards. To that end, WECC and NERC are continuing the Reliability Assurance Project aimed at assessing how well entities have internalized lessons from the 2011 Southwest Outage and made appropriate adjustments to their operating practices, tools, and approaches.

Since 2016, a joint team of WECC and NERC staff visited 24 TOPs; they have another 10 visits scheduled for 2018. During a typical onsite visit, the project team meets with frontline personnel to evaluate operational practices and get a better glimpse of the entity's day-to-day performance. The team engages in informal discussions, develops observations, and provides suggestions for improvement. It has been our experience that entities are hungry to improve, but WECC and the industry need to partner to increase the speed of that improvement. Many entities have told us about improvements they have made in response to our findings. And that is our major goal: helping entities improve the reliability of their operations.

The Reliability Assurance Project is not a compliance effort and no formal actions result from the visits. Aside from customized feedback on best practices and potential areas for improvement, the

primary outcome is a report outlining WECC's high-level findings across system studies, system visualization, communications, and data sharing. The report is public and maintains company privacy and anonymity.

In support of increased reliability, WECC is looking for continual improvement, particularly changes in culture and mindset, that posture the Interconnection for continuous improvement. We encourage entities to shift from a reactive to a proactive stance to ensure continuous improvement, and the ability to identify risks to reliability and develop appropriate plans to mitigate those risks. This will be increasingly critical as we face changes to the grid like the integration of more and more renewable resources.

To access 2017 assurance visit findings, visit <https://www.wecc.biz>. **NWPPA**



Jim Robb is the CEO and president of the Western Electricity Coordinating Council. He can be reached at jrobb@wecc.biz.

SMUD DEPLOYS TO PUERTO RICO ON A POWER RESTORATION MISSION

By Christopher Capra, Sr.



SMUD lineworkers prepare the tools and the trucks they would use to do restoration work in Puerto Rico. These lineworkers volunteered for the mission after ringing in the New Year.

Last September, hurricanes hit Puerto Rico causing massive devastation to its people, property, and public services. First, Hurricane Irma hit and then Hurricane Maria wasn't far behind. One of the most apparent disruptions was to the island's power system. More than a million and a half people were without lights for weeks and then months. The Puerto Rico Electric Power Authority grid infrastructure is old and, in some cases, not particularly well-maintained. Some pre-storm media accounts quoted PREPA electrical workers saying the storms would knock out power for six months if the forecasts were correct. They were right. Despite mutual aid efforts from mainland utilities, most of those one and a half million people were still in the dark in January.



The next wave: SMUD's trucks were driven to Lake Charles, La., and loaded onto barges sharing space with other public power utilities for the 10-day voyage to the port of Ponce, P.R.

The next wave

More crews and materials were needed to continue the huge restoration effort. As we all rang in a happy New Year 2018, some SMUD linemen were planning the logistics of a humanitarian mission to Puerto Rico. These linemen volunteered for the assignment: move 15 trucks, lots of tools, and other equipment more than 2,000 miles by highway on lowboy trailers from Sacramento, Calif., to Lake Charles, La. There it would all be loaded onto a barge, which set sail for Ponce, a large port on the south end of the Caribbean island. It would take about 10 days to travel the remaining 1,800 miles before arriving in Puerto Rico. The linemen would fly there to pick up their trucks and gear, and commence the massive challenge of restoring power that awaited them.

Incredible damage

When SMUD Line Supervisor Michael Bazil arrived he couldn't believe what he saw. He described the damage to the electrical system when they hit the ground: "We had to go to Ponce to get our trucks and we saw so much damage. You cannot believe how much damage there is. There are lines down

on the ground—transmission lines, towers, sub transmission lines, all their distribution lines are down. There are just piles of communication lines piled up on the side of the road, so it's pretty bad."

Bazil's crews—two six-man crews and a mechanic—deployed to the Carolina section of the island, east of San Juan. Tropical rain storms came and went throughout the day as Bazil's crews cut through bamboo trees and brush to get to and repair damaged infrastructure in neighborhoods.

"Another issue we faced is how to determine what needed repair and what to leave alone. There is a lot of abandoned electrical infrastructure that has not been energized in years with old transformers and overhead high-voltage lines still either up in the air or hanging down to the ground in the back yards mixed with secondary conductors coming from a completely different system out in the roadways. It took a little bit of time to figure out, but we are moving along now," said Bazil. They moved along so well, in fact, that soon the bleak picture Bazil described when they arrived started to get better, slowly but surely.



SMUD lineworkers encountered a tropical environment often and had to cut through large overgrowths of bamboo to get to the distribution equipment they needed to repair or replace.

“Tengo la luz!”

As breakers atop poles were snapped into place, and circuits that were open for so long were closed again, lights came on in the neighborhoods. “Tengo la luz!” (“I have light!”) one customer happily yelled. Families poured out of homes and onto the streets. They greeted SMUD and other mainland utility crews like liberators. Many of these locals hadn’t had electrical service for about four months. There were celebrations. Many of them took to social media to express their gratitude.

“This is great news!” exclaimed a Sacramento radio talk show host as he interviewed Basil on the phone. “All we have been hearing is bad news. To talk to you, this is very, very meaningful!” Basil responded on the air, “If you haven’t seen the videos then you need to watch them. People are crying. People are holding each other and jumping up and down. I’ve got videos where people are so happy. It’s like you’re in a parade, people are just so happy to get their power back!”





Public power at its best

SMUD being a community-owned electric company is always ready to lend a hand and has a long history of providing utilities outside its Sacramento County service territory with mutual-aid assistance. SMUD's involvement is part of the utility industry's ongoing response in Puerto Rico as several electric companies have signed onto a memorandum of understanding (MOU) to work with PREPA, as well as the U.S. Army Corps of Engineers, in ongoing efforts to restore power to the people of Puerto Rico.

The mission came together as SMUD, along with the American Public Power Association, worked with other public power utilities, including Richmond (Indiana) Power and Light and Norwich (Connecticut) Public Utility, to send crews to restore power in Puerto Rico. SMUD and the other utilities' work is expected to take two months or more. SMUD rotated its crews after about 30 days and replaced them with fresh personnel.

The MOU was developed by the APPA, Edison Electric Institute, and National Rural Electric Cooperative Association. It serves as a plan that allows electric companies on the mainland (that are members of APPA, EEI, or NRECA) to enter into emergency agreements.

SMUD's labor, materials, and other costs for the effort, which are expected to be about \$5 million, will be reimbursed by the Federal Emergency Management Agency, so SMUD customers won't be impacted financially. SMUD also kept plenty of crews and equipment home to respond to any power outage issues locally, especially during the winter season, which in Sacramento can be windy and wet and cause potential power outages.

Ongoing challenges

Bazil's crews' tour of restoration work took about 30 days and ended on February 16 when another group of two SMUD six-man crews and a mechanic flew in to relieve them. They'll work into March.

"Leaving it better than we found it."

Despite all the difficulties and the frustrations, the mission is a success. While SMUD and the many utilities involved in doing this noble work won't be completely rebuilding Puerto Rico's electric grid, it will be a functional system and folks who haven't had electricity in months are, or will soon be, able to take for granted again that the lights will come on at the flick of a switch.

"We are repairing like for like," Bazil said. "If the lines are down we are getting them back up. We're doing what we can to get power back to the people. The stuff that we do put up, it will be better than what came down."

At SMUD we live and work by the standard: "We leave it better than we found it." And that's exactly what we're going to do. **NWPPA**

Christopher Capra, Sr. is a public information specialist at SMUD in Sacramento, Calif. He can be reached at Christopher.Capra@smud.org.



JOB OPPORTUNITIES

For more detailed information, visit www.nwppa.org/job.

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- The *Bulletin* is mailed by the 15th of each month.
- Complete the online Job Opportunities ad placement form at www.nwppa.org.
- NWPPA reserves the right to edit all listings in order to fit size requirements in the publication.

POSITION: Director of Regulatory & Governmental Affairs, General Counsel
COMPANY: Pend Oreille Public Utility District (Newport, Wash.)
SALARY: DOE
DEADLINE TO APPLY: March 30, 2018
TO APPLY: Visit www.popud.org.

POSITION: Project Manager, Capital Construction R17-674
COMPANY: Portland General Electric (Portland, Ore.)
SALARY: DOE
DEADLINE TO APPLY: April 2, 2018
TO APPLY: Visit www.portlandgeneral.com/careers.

POSITION: Utility/Senior Utility/Principal Utility Analyst/Data Scientist
COMPANY: Snohomish County PUD (Everett, Wash.)
SALARY: \$57,037 - \$138,213 per year
DEADLINE TO APPLY: March 31, 2018
TO APPLY: Visit www.snopud.com.

POSITION: Stat Meter and Relay Tech
COMPANY: Pacific Power (Roseburg, Ore.)
SALARY: \$48.86 per hour
DEADLINE TO APPLY: March 27, 2018
TO APPLY: Visit <https://career4.successfactors.com/sfcareer/jobreqcareer?jobId=16979&company=pacificorp&username=>.

POSITION: Engineer III, System Automation Engineer (R17-215)
COMPANY: Portland General Electric (Portland, Ore.)
SALARY: DOE
DEADLINE TO APPLY: March 29, 2018
TO APPLY: Visit www.portlandgeneral.com/careers.

POSITION: Engineer I, Electrical (R16-732)
COMPANY: Portland General Electric (Portland, Ore.)
SALARY: DOE per week
DEADLINE TO APPLY: March 22, 2018
TO APPLY: Visit www.portlandgeneral.com/careers.

POSITION: SPEC IV—Automation Test and Energization R17-526
COMPANY: Portland General Electric (Portland, Ore.)
SALARY: DOE
DEADLINE TO APPLY: March 29, 2018
TO APPLY: Visit www.portlandgeneral.com/careers.

POSITION: Distribution Power System Engineer
COMPANY: Chelan County Public Utility District (Wenatchee, Wash.)
SALARY: To \$99,400 per year
DEADLINE TO APPLY: March 28, 2018
TO APPLY: Visit www.chelanpubd.org.

POSITION: Temporary Journey-level Lineworker
COMPANY: City of Ellensburg (Ellensburg, Wash.)
SALARY: \$66.42 per hour
DEADLINE TO APPLY: March 27, 2018
TO APPLY: Visit www.ci.ellensburg.wa.us.

POSITION: Parks Superintendent
COMPANY: Chelan County PUD (Wenatchee, Wash.)
SALARY: \$63,524 - \$84,700 per year
DEADLINE TO APPLY: March 26, 2018
TO APPLY: Visit www.chelanpubd.org.

POSITION: Manager II, Balancing Authority Operations (R18-159)
COMPANY: Portland General Electric (Portland, Ore.)
SALARY: DOE
DEADLINE TO APPLY: March 19, 2018
TO APPLY: Visit www.portlandgeneral.com/careers.

POSITION: Journeyman Meterman
COMPANY: Municipal Light & Power (Anchorage, Alaska)
SALARY: \$50.10 per hour
DEADLINE TO APPLY: April 20, 2018
TO APPLY: Visit www.muni.org/jol.

POSITION: [Tacoma Public Utilities Director](#)
COMPANY: City of Tacoma (Tacoma, Wash.)
SALARY: DOE
DEADLINE TO APPLY: March 23, 2018
TO APPLY: Visit www.cityoftacoma.org.

POSITION: [Hydro Maintenance Director](#)
COMPANY: Chelan PUD (Wenatchee, Wash.)
SALARY: \$103,260 - \$146,500 per year
DEADLINE TO APPLY: March 20, 2018
TO APPLY: Visit www.chelanpud.org.

POSITION: [Operations Supervisor](#)
COMPANY: Kittitas County Public Utility District No. 1 (Ellensburg, Wash.)
SALARY: DOE
DEADLINE TO APPLY: March 20, 2018
TO APPLY: Visit www.kittitaspud.com.

POSITION: [Manager of Engineering Services](#)
COMPANY: Homer Electric Association (Homer, Alaska)
SALARY: DOE
DEADLINE TO APPLY: March 31, 2018
TO APPLY: Visit <http://homerelectric.applicantpro.com/jobs>.

POSITION: [Meter & Relay—Electronic Integrated Systems Mechanic](#)
COMPANY: Western Area Power Administration—Desert Southwest Region (Phoenix, Ariz.)
SALARY: \$48.35 - \$50.36 per hour
DEADLINE TO APPLY: May 10, 2018
TO APPLY: Visit www.usajobs.gov.

POSITION: [Senior Electric Engineering Technician](#)
COMPANY: City of Healdsburg (Healdsburg, Calif.)
SALARY: \$7,186-\$8,735 per month
DEADLINE TO APPLY: March 16, 2018
TO APPLY: Visit www.ci.healdsburg.ca.us.

POSITION: [Lineman](#)
COMPANY: City of Port Angeles (Port Angeles, Wash.)
SALARY: \$44.44 per hour
DEADLINE TO APPLY: July 31, 2018
TO APPLY: Visit www.cityofpa.us.

POSITION: [Electric Superintendent](#)
COMPANY: City of Milton-Freewater (Milton-Freewater, Ore.)
SALARY: \$100,872 to \$122,628 per year
DEADLINE TO APPLY: March 30, 2018
TO APPLY: Email Teresa.Dutcher@milton-freewater-or.gov.

POSITION: [Assistant General Manager](#)
COMPANY: Kootenai Electric Cooperative, Inc. (Hayden, Idaho)
SALARY: DOE
DEADLINE TO APPLY: April 11, 2018
TO APPLY: Visit www.kec.com/content/job-opportunities.

POSITION: [Senior Electrical Engineer](#)
COMPANY: Kodiak Electric Association (Kodiak, Alaska)
SALARY: DOE
DEADLINE TO APPLY: April 7, 2018
TO APPLY: Email nbsweeney@kodiak.coop.

POSITION: [Energy and Minerals Division Manager](#)
COMPANY: County of Santa Barbara, Calif. (Santa Barbara, Calif.)
SALARY: \$94,248.68 to \$128,718.51 per year
DEADLINE TO APPLY: March 19, 2018
TO APPLY: Visit <https://secure.cpshr.us/escandidate/JobDetail?ID=313>.

POSITION: [Chief Executive Officer](#)
COMPANY: Columbia Rural Electric Association (Walla Walla, Wash.)
SALARY: DOE
DEADLINE TO APPLY: March 17, 2018
TO APPLY: Email ExecutiveSearch@nreca.coop.

POSITION: [Senior Network and System Administrator/Analyst](#)
COMPANY: Oregon Trail Electric Cooperative (Baker City, Ore.)
SALARY: DOE
DEADLINE TO APPLY: March 19, 2018
TO APPLY: Visit <https://otecc.com/careers>.

POSITION: [Engineering Manager](#)
COMPANY: PUD #1 of Clallam County (Carlsborg, Wash.)
SALARY: \$9,292 - \$13,177 per month
DEADLINE TO APPLY: March 21, 2018
TO APPLY: Email pprouse@mfpllc.us.

POSITION: [Journeyman Lineman](#)
COMPANY: City of Milton-Freewater (Milton-Freewater, Ore.)
SALARY: \$44.88 per hour
DEADLINE TO APPLY: March 25, 2018
TO APPLY: Visit www.mfcity.com.

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