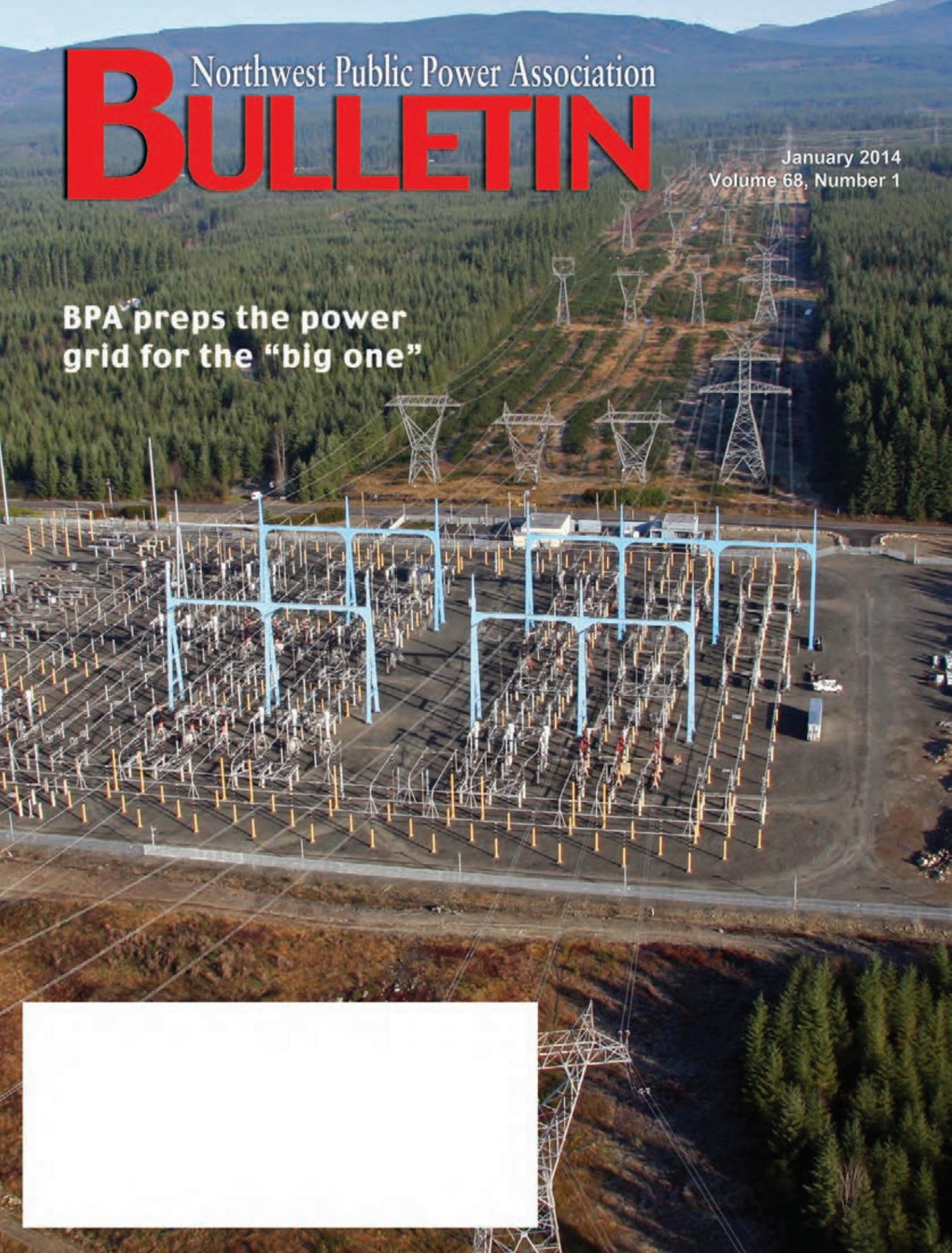


Northwest Public Power Association **BULLETIN**

January 2014
Volume 68, Number 1

**BPA preps the power
grid for the “big one”**





12



16



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On the cover: An aerial shot of transmission lines coming in and out of BPA's Raver Substation in Ravensdale, Wash. Photo by BPA Aircraft Patrol Observer Ron Totorica.

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The *Bulletin* is a publication of Northwest Public Power Association, a regional organization of diverse utilities. The membership is made up of utility districts, electric cooperatives, municipalities, and crown corporations in Alaska, British Columbia, California, Idaho, Montana, Nevada, Oregon, and Washington. We are also a trade association for nearly 300 companies, individuals, and organizations affiliated with the electric power industry.

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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Have you submitted your annual nominations yet?

If you have not yet submitted your nominations for the 2014-2015 NWPPA Board of Trustees, 2014 annual awards, and/or 2014 resolutions, you still have a few weeks to do so. As a reminder, the due dates for each are:

- **January 31, 2014:** Nominations for the *Life Awards*, *Paul J. Raver Community Service Award*, *John M. George Public Service Award*, and *William "Bill" McCrorie Distinguished Service Award*.
- **February 1, 2014:** Nominations for the five vacant utility member seats and one associate member seat on the 2014-2015 NWPPA Board of Trustees. Please note that there was an error in the December 2013 *Bulletin* and the nomination form you may have received via the mail; the Association needs to fill the Oregon seat with a general manager from a cooperative, not a PUD.
- **February 13, 2014:** Submissions for any new draft resolutions or updates to the existing 2013 resolutions.

If you have questions about any of the above categories, please contact NWPPA at (360) 254-0109 or nwppa@nwppa.org. NWPPA

Debunking the ESM mystery

Many members ask about the ESM category of rates that they see on NWPPA's registration pages for our classes and other training events. ESM stands for education sustaining member. ESM dues are an additional amount that a utility pays so that its employees can attend a class at the least expensive rate possible. This additional benefit covers full-time and part-time people, including policymakers. ESM dues are determined by the amount of employees at a utility.

For more information about ESM dues, or to add this benefit to your membership, please contact Gail at (360) 816-1450. NWPPA

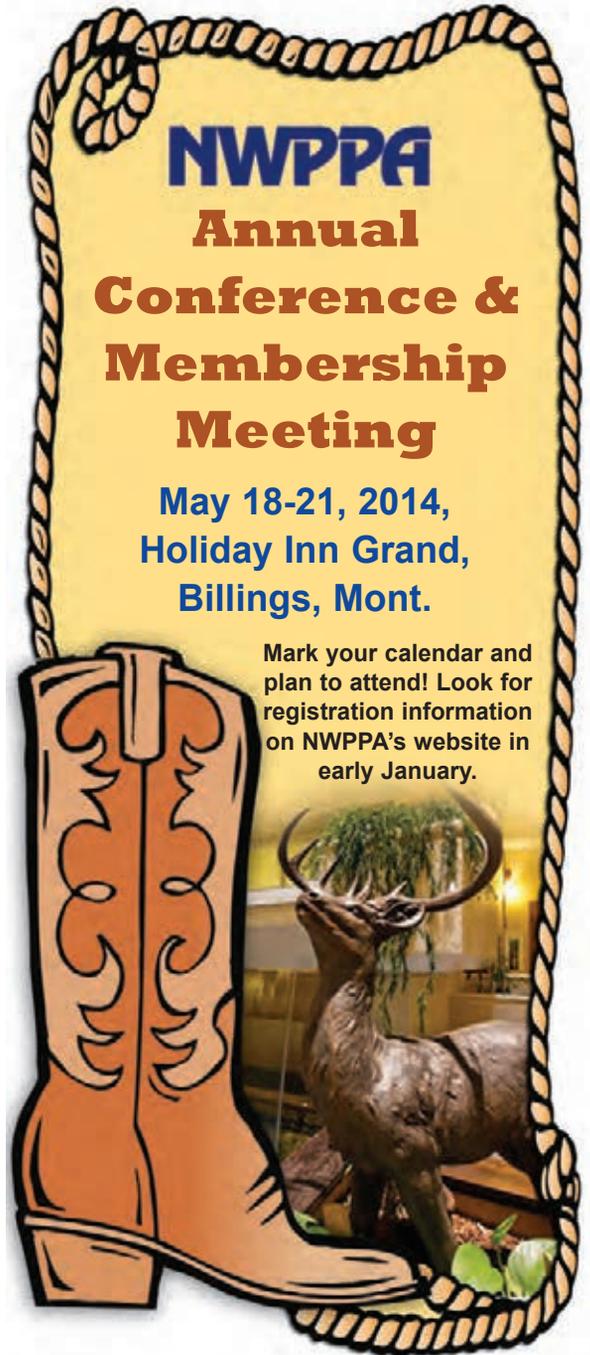


Save the date!

NWPPA Annual Conference & Membership Meeting

May 18-21, 2014,
Holiday Inn Grand,
Billings, Mont.

Mark your calendar and plan to attend! Look for registration information on NWPPA's website in early January.



Getting to know the NWPPA Board

- **Name:** Chuck Thurman
- **Utility:** City of Monmouth Power & Light (Ore.)
- **Position:** Superintendent
- **Years in utility industry:** Over 34 years
- **Years on NWPPA Board:** First year
- **What are the current challenges at your utility?** As an NT customer of Bonneville Power, we are particularly concerned about the political arena surrounding the regional management of BPA and the Columbia River Treaty discussions, and the total impact of which may affect increasing power costs.
- **What do you see as the current challenges in the industry?** The energy industry is becoming more and more technology driven. This creates industry-wide concern as we plan, secure, and deliver power. Our workforce faces daily challenges with technology upon which we have grown to depend. Staying current — let alone ahead of — advances in the side effects of rapidly changing technology is very challenging (for example, safety and training, customer satisfaction, cyber security, etc.).
- **How does NWPPA help your utility and the industry with these challenges?** NWPPA not only assists us with a better understanding of local and regional issues, it communicates political and regulatory information from an advocacy viewpoint. NWPPA provides networking opportunities for utilities to gather and share/disseminate information which lends itself to forming alignment around common challenges. Additionally, NWPPA provides training opportunities that are of benefit to public power employees and are generally a very cost-effective solution for smaller utilities.
- **Any hobbies outside of the public power world?** I very much enjoy time spent with my family and friends. Hiking and camping are frequent activities. I am not really much of a hands-on “artsy” person; however, I have enjoyed working with glass for over 25 years. I recently put the stained glass projects aside and began working with fused glass. **NWPPA**



A look back at public power

50 years ago — 1964

Using REA loan funds to build a seven-mile, three-phase 12,470-volt line, Northern Lights began serving the Schweitzer Basin Ski Area, a major new winter sports center overlooking Pend Oreille Lake (Idaho) ... Mason County PUD No. 1 announced that it had held an open house in late November for its new office and new manager’s residence north of Shelton, Wash. ... Matanuska Electric Association purchased the Talkeetna Power and Fuel Company from Myron A. Stevens for \$115,000 (Alaska) ... Missoula Electric Cooperative received a \$438,000 REA loan to complete several projects; upon completion, the cooperative will be operating 819 miles of line serving 2,250 consumers (Mont.).

25 years ago — 1989

The Washington Public Utility Districts Association honored Pacific County PUD’s Denny Evans with the William T. Elmgren Public Service Award ... Ronald H. Wilkerson was chosen to serve as the new manager of the Western Montana Electric Generating and Transmission Cooperative ... In a suit filed by Snow Mountain Pine Co., the Oregon Public Utilities Commission ruled that Oregon Trail Electric Cooperative must pay only 3.62 cents per kilowatt-hour for cogenerated power ... Sun River Cooperative Director Ron Ostberg was elected to be the new president of the Montana Electric Cooperatives’ Association.

5 years ago — 2009

Mason County PUD No. 3 announced the appointment of Scott Peterson as its new Shelton line superintendent (Wash.) ... Golden Valley Electric Association introduced its Experimental Renewable Resource Purchase Program, a new program to promote member-owned renewable resource generation and assist the co-op’s efforts to meet its Green Power Pledge (Alaska) ... The Tacoma Public Utility Board voted to return approximately \$15 million to its Tacoma Power customers after receiving a refund from the Bonneville Power Administration for overpayment (Wash.) ... The Turlock Irrigation District Board of Directors approved an agreement to purchase the Tuolumne Project, a renewable power wind project (Calif.). **NWPPA**

February, March, and April 2014

Please register 30 days in advance to receive the Early Bird discount. See www.nwppa.org for more information.

STAKING TECHNICIAN CERTIFICATION PROGRAM – CONSTRUCTION CONTRACT ADMINISTRATION

Who Should Attend: Staking technicians.

Overview: A well-written construction contract and properly drawn set of plans and specifications will go a long way toward getting the lowest bid prices, while easing administrative burdens. Accurate accounting of the materials and close monitoring of the contractor's progress are essential to completing a project on time and on budget. Attendees will learn how the construction contract affects every aspect of the project, and how to administer the contract terms and conditions for a successful outcome.

FEBRUARY 3, 2014 — VANCOUVER, WASH.

NEW! DEVELOPING A CYBER SECURITY & RISK MITIGATION PLAN

Who Should Attend: IT personnel and anyone responsible for cyber security planning and NERC CIP compliance.

Overview: This class introduces NRECA's Cooperative Research Network (CRN) guide that any utility can use to strengthen its security posture and chart a path of continuous improvement. Course materials include a cyber security risk mitigation checklist; a template that attendees can use to create their own cyber security plans; security questions to ask smart grid vendors; and an interoperability and cyber security plan which examines risk management, the identification of critical cyber assets, electronic security perimeters, and other issues.

FEBRUARY 4, 2014 — SPOKANE, WASH.

STAKING TECHNICIAN CERTIFICATION PROGRAM – JOINT USE STAKING AND MAKE-READY SURVEYS

Who Should Attend: Staking technicians.

Overview: The communications industry is forever scrambling for pole rental space on distribution structures to attach telephone, CATV, and fiber optic cables. With right-of-way becoming harder to obtain, electrical utilities — both distribution and transmission — are combining circuits on one pole line to maximize efficiency and reduce costs. This course will teach students how to handle joint use attachments by learning how to perform make-ready surveys, measure clearances, determine strength requirements, prepare construction estimates, make final inspections, and understand the requirements of joint use.

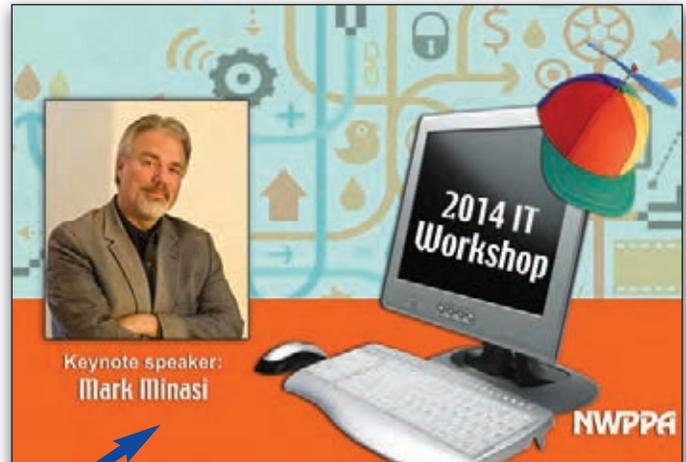
FEBRUARY 4, 2014 — VANCOUVER, WASH.

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

Who Should Attend: Staking technicians, customer service engineers, and other employees involved in the design of new electrical services.

Overview: In this course, attendees will learn to design overhead electrical distribution structures. The course is organized as a set of building blocks, each segment building upon the other. The building blocks include conductors, poles, pole-top assemblies, guys, and anchors. Tables and graphs of design values will also be provided for immediate use in the field. Attendees will also learn basic calculations to determine maximum allowable spans; wind and ice loading; and total guy load.

FEBRUARY 5-7, 2014 — VANCOUVER, WASH.



IT WORKSHOP

Who Should Attend: IT professionals and others who are responsible for utility security.

Overview: This year's keynote presentation is "The Missile and the Mobility: What's New and What to Do with Server 2012 R2 and Windows 8.1" by noted IT guru Mark Minasi. Other topics include: ES-ASAC and portal (presented by a representative from NERC); security audits; selecting a collaboration and document management program; project outsourcing; and getting buy-in for IT policies.

FEBRUARY 5-7, 2014 — SPOKANE, WASH.

NEW! ONLINE — LISTENING FOR EFFECTIVE PROBLEM SOLVING

Who Should Attend: Anyone with an interest in customer/member service skills or interoffice relationships.

Overview: Today, more than ever, customers want to be heard and feel that their issues are truly resolved. Effective listening on your part will help you resolve their concerns more effectively. This session will focus on understanding what is important to customers and how to determine the real issues at hand. You will gain skills to help you be laser-focused on listening to your customers.

FEBRUARY 12, 2014 — ONLINE PRESENTATION

NEW! UNDERSTANDING DIFFERENCES IN UTILITIES: A HISTORICAL PERSPECTIVE

Who Should Attend: Accounting and finance staff, policy makers, and any staff interested in learning about public power history.

Overview: This one-day workshop provides an introduction for employees about the history of electricity, the rise of public power, and current trends in the electric utility industry. The history of public power is rich and enduring because of the work of a grassroots group of men and women with a vision for a better life.

FEBRUARY 12, 2014 — SPOKANE, WASH.

NEW! BASICS OF BUDGETING AND FINANCIAL FORECASTING

Who Should Attend: Finance and accounting employees; senior management or policy makers; or any employee seeking to increase his or her knowledge of the budgeting process that takes place at electric utilities.

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TRAINING OPPORTUNITIES

Overview: In this one-day seminar, attendees will create a basic budget that ties the following elements together: the Work Plan, a verbal presentation of what will be accomplished during the next budget year; an operating (profit and loss) budget, analyzing income and expenses anticipated to accomplish the work set out in the Work Plan; a capital budget outlining what assets will be purchased or built as outlined in the Work Plan; a cash budget tying together the operating and capital budget; and a balance sheet outlining changes to assets, liabilities, and owner equity (net assets).

FEBRUARY 13, 2014 — SPOKANE, WASH.

EMPLOYER COLLECTIVE BARGAINING TEAM PREPARATIONS

Who Should Attend: General managers, operations managers, members of the employer bargaining team, and chief negotiators.

Overview: This course will cover the three phases of collective bargaining: preparation and defining the range/scope of negotiations; bargaining over issues, both non-economic and economic, and packaging of all remaining issues; and package offers, offer variations, final offer, and achieving agreement or implementation of the final offer. Specific topics covered in the class include: basic negotiation theory; concept of mutuality; the role of the negotiator; grasping the concept of interest vs. positions; how to preserve management's rights under the labor contract; collective bargaining responsibilities; understanding what constitutes unfair labor practice; the duty to bargain in good faith; the employer's duty to disclose information; and management policies in bargaining.

FEBRUARY 19, 2014 — SPOKANE, WASH.

PATHWAYS TO LEADERSHIP SESSION #4, SERIES 1: LEAD YOUR ORGANIZATION — MAXIMIZE PERFORMANCE WITH ORGANIZATIONAL TOOLS

Who Should Attend: Directors, managers, graduates of the Frontline Leadership series, and newly appointed senior leaders.

Overview: Pathways to Leadership Session 4 will focus on leading within your organization by maximizing the performance of your team. There is a big difference between knowing how to survive in the organization and knowing how to help your organization succeed. This session will help you do both. You will learn and apply key tools for maximizing and sustaining high performance within your team; in doing so, you will make clear ties to the success of your organization.

FEBRUARY 19-20, 2014 — VANCOUVER, WASH.

APPLYING THE NESC TO DAY-TO-DAY UTILITY WORK

Who Should Attend: Engineers, staking engineers, operations supervisors, foremen, technicians, linemen, safety personnel, and inspectors. Prior knowledge of the National Electrical Safety Code (NESC) is not required.

Overview: Understanding the National Electrical Safety Code (NESC) rules is a must for personnel responsible for operating a safe utility system. This two-day class focuses on the rules in the NESC. On day one, the class will provide a general overview of each part of the NESC; on day two, applying the code to day-to-day work will be stressed by focusing on practical NESC examples and applications.

FEBRUARY 19-20, 2014 — VANCOUVER, WASH.

LINEMAN SKILLS SERIES: DAY 1 — 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.

Overview: This advanced class provides attendees with a journeyman lineman's view of AC transformers. The curriculum includes a combination of electrical theory and hands-on practice. The overall

program is to teach students how transformers are used to manage and control the flow of alternating current in electrical distribution systems. Attendees will be provided with an opportunity to work with and arrange transformers in a variety of configurations to achieve specific voltage outputs using hands-on equipment and computer simulation.

FEBRUARY 25, 2014 — BOISE, IDAHO

NEW! TELEPHONE EXCELLENCE

Who Should Attend: Customer service professionals and others who work with customers by phone.

Overview: During this session, you will identify what is most important about your skills on the phone and focus on ways to engage your customer within the first few seconds throughout the call. It will also give you skills that will help you with your telephone etiquette and the way in which you phrase your responses. The instructor will take you through various scenarios as examples of how to handle issues that come up during phone conversations. In the end, you will gain some great skills that will help you become a telephone customer service pro!

FEBRUARY 25, 2014 — PORTLAND, ORE.

FRONT LINE LEADERSHIP #1: SITUATIONAL LEADERSHIP

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

Overview: Participants will be introduced to situational leadership as taught by the Ken Blanchard Companies and will evaluate their own leadership styles through a self-evaluation. They will learn a common vocabulary for leadership and understand the differences between successful and effective leadership.

FEBRUARY 25-26, 2014 — TACOMA, WASH.

NEW! PATHWAYS TO LEADERSHIP SESSION #1, SERIES 2: LEAD YOURSELF

Who Should Attend: Directors, managers, graduates of Frontline Leadership, and newly appointed senior leaders.

Overview: Pathways to Leadership is the next level of leadership development offered by NWPPA for its members. Session 1 will provide a clear roadmap of the entire Pathways to Leadership learning experience. You will see how this program is specifically designed for the workplace leader within the public power electric utility industry.

FEBRUARY 25-27, 2014 — TACOMA, WASH.

LINEMAN SKILLS SERIES: DAY 2 — REGULATORS AND CAPACITORS: POWER QUALITY FOR LINEMEN

Who Should Attend: Electrical linemen, line crew foremen, substation personnel, electrical engineers, and all personnel that would benefit from a theoretical and practical knowledge of regulators and capacitors.

Overview: This course is designed to help the student better understand the function, purpose, and application of regulators and capacitors. The class will review power factor calculations, induction regulators, and step regulators. Students will observe the inner workings of a step voltage regulator and applied electrical theory. Students will also learn to work safely with various capacitors in different configurations and connections, while using hands-on demonstrations.

FEBRUARY 26, 2014 — BOISE, IDAHO

LINEMAN SKILLS SERIES: DAY 3 — PERSONAL PROTECTIVE GROUNDING

Who Should Attend: All electrical workers involved in personal protective grounding.

Overview: This course discusses protective grounding theory, emphasizing safety and the range of acceptable currents. It also covers visual inspection of grounding systems (mats, connectors, risers, and straps); special considerations and hazards (IEEE Standard 80); and personal protective grounds, including sizing, testing, inspection, maintenance, and use.

FEBRUARY 27, 2014 — BOISE, IDAHO

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 employees.

Overview: This popular two-day course presents a clear understanding of the technical heartbeat of the utility by providing employees with a comprehensive understanding of electric utility system operations, including generation (fossil fuel, hydro, and nuclear generation), transmission, and distribution (down to 120v/240v residential connections). You will learn how all key pieces of equipment in the system are built, how the equipment operates, and how the equipment functions in the overall operations of a utility system.

MARCH 4-5, 2014 — SEATTLE, WASH.

UNBUNDLED COST OF SERVICE AND RATE DESIGN

Who Should Attend: Accounting and finance staff, policy makers, or any utility employee with an interest in ratemaking and/or cost of service analysis.

Overview: This two-day class is offered as part of the NWPPA Utility Accounting and Finance Certificate Program. It provides an introduction to utility ratemaking and the potential impact to utilities in our restructured industry. Participants will develop an understanding of the theory surrounding unbundled rates and the development of unit costs by function (generation, transmission, distribution, etc.), customer class, or rate schedule. Rate design in a competitive environment will be a key topic covered in the course. A demonstration of the cost of service calculation spreadsheet will be held on day two.

MARCH 5-6, 2014 — PORTLAND, ORE.

FOREMAN LEADERSHIP SKILLS #2: EFFECTIVE PROBLEM SOLVING & TRANSITIONING FROM EMPLOYEE TO FOREMAN

Who Should Attend: Foremen and crew leaders. (Please note that classes in this series may be taken in any order.)

Overview: Day 1: *Effective Problem Solving and Decision Making*. How do you know if your crew is performing at its best? Do you see potential for improvement but you do not know where to start? This course will provide you with tools for diagnosing your own team and matching your diagnosis to an intervention technique. Day 2: *Transitioning from Employee to Foreman: Keys to Discipline and Delegation*. The second day is designed to provide participants with an understanding of the dynamics of workplace relationships and strategies for how to better manage those and improve relationships through an effective delegation of duties, tasks, and responsibilities. Participants will gain insight into the connection between relationships and how motivation through delegation will assist you in reconciling both. The seminar focuses primarily on dealing with employees who allow changed relationships to negatively impact their performance and disrupt the work environment.

MARCH 11-12, 2014 — VANCOUVER, WASH.

OPERATIONS MANAGER & LINE SUPERINTENDENT BOOTCAMP 2013-2014 SERIES: SESSION 3

Who Should Attend: Newly appointed operations managers, line superintendents, or those who have leadership potential.

Overview: Day 1: *Developing Your Workforce*. Understanding the role leaders play in developing their workforce is essential to both their success and the organization's success. This course is devoted to learning the key skills associated with growing a department into one that identifies, builds, and plans for success. Participants in this course will acquire tools, strategies, and knowledge that will strengthen their leadership skills. Day 2: *Building on Existing Leadership Skills to Get Results*. This one-day course is designed to build upon existing leadership skills by providing an opportunity to practice various skills and concepts. Participants will gain valuable insights into how to develop one's ideas and communicate them effectively as a means of having them accepted.

MARCH 11-12, 2014 — SACRAMENTO, CALIF.

ONLINE — MANAGING ANGRY CUSTOMERS

Who Should Attend: Anyone with an interest in customer/member service skills or interoffice relationships.

Overview: With the levels of stress today, customers have less tolerance for representatives who are not resolving their needs in a friendly and helpful manner. In this session, we will identify the types of challenging customers that representatives face today and the strategies for managing their anger more effectively. In the end, you will learn how to calm the customer down and keep yourself sane!

MARCH 12, 2014 — ONLINE PRESENTATION

NEW! TALENT ACQUISITION IN TODAY'S UTILITY

Who Should Attend: Hiring managers, HR personnel, and anyone involved in the recruiting and hiring process. This class is been submitted to the HR Institute for credits toward PHR, SPHR, and GPHR recertification.

Overview: Recruiting the right talent is crucial to your utility's success. But whom do you hire? Where do you find them? How do you differentiate a good candidate from a bad one? Besides having the right technical skills, will they be a fit for the culture of your utility? Talent acquisition does not have to be hard, but it does take time, discipline, and patience.

MARCH 12-13, 2014 — PORTLAND, ORE.

NORTHWEST WAGE & HOUR QUARTERLY MEETING

Who Should Attend: Members of the Northwest Wage and Hour group: general managers, labor relations, and human resource professionals.

Overview: Roundtable meetings are opportunities for members of the Northwest Wage and Hour group to discuss issues relevant to labor relations within public utilities. This meeting will include Steering Committee updates and roundtable discussions on contract negotiations (excluding rates and percentages), grievances, arbitrations, and other current topics. All attendees are given the opportunity to talk about current labor relation issues at their utilities and to ask for advice from other members.

MARCH 14, 2014 — PORTLAND, ORE.

ADMINISTRATIVE PROFESSIONAL CERTIFICATE LEVEL 1: ALL FOUR DAYS

Who Should Attend: Administrative assistants, executive secretaries, or employees in administrative or service-oriented roles.

Overview: This is a four-day series of classes that provides utility-specific information directed toward administrative assistants and

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TRAINING OPPORTUNITIES

executive secretaries who want to become more effective in managing their tasks and in communicating with others. By registering for all four classes, you will receive \$100 off the total registration (\$25 off each of the regular daily rates).

MARCH 18-21, 2014 — SPOKANE, WASH.

ADMINISTRATIVE PROFESSIONAL CERTIFICATE LEVEL 1: DAY 1 — PERSONAL LEADERSHIP SKILLS

Who Should Attend: Administrative assistants and executive secretaries, or employees in administrative or service-oriented roles.

Overview: Participants will learn to do the following: understand the duties and responsibilities of those who are in positions of power and influence; understand attitudes and behaviors that enhance leadership capabilities and how to apply them; know the fundamental principles of human motivation and performance in an organizational environment; and know how to inspire optimum performance from your own efforts and from your co-workers.

MARCH 18, 2014 — SPOKANE, WASH.

ADMINISTRATIVE PROFESSIONAL CERTIFICATE LEVEL 1: DAY 2 — ORGANIZATIONAL DYNAMICS

Who Should Attend: Administrative assistants and executive secretaries, especially employees new to these positions.

Overview: This one-day course serves as an overview of business organization principles, including structure and operation. Topics covered include basic business economic theory, organizational structure, planning, and productivity. Participants will learn about the following: organizational culture; basis of power and group dynamics; goals, objectives, and standards; and process mapping/analysis.

MARCH 19, 2014 — SPOKANE, WASH.

ADMINISTRATIVE PROFESSIONAL CERTIFICATE LEVEL 1: DAY 3 — BUSINESS COMMUNICATION SKILLS

Who Should Attend: Administrative assistants and executive secretaries, especially employees new to these positions.

Overview: This one-day seminar covers the basic rules and conventions of both conversational and written language as they apply to the business environment. Topics covered include proper sentence structure, appropriate word choice, and correcting common errors in spelling and punctuation. Also discussed is the use of traditional literary devices to promote clarity, favorable impression, and understanding.

MARCH 20, 2014 — SPOKANE, WASH.

ADMINISTRATIVE PROFESSIONAL CERTIFICATE LEVEL 1: DAY 4 — THE BASICS OF ELECTRICAL SYSTEMS

Who Should Attend: Administrative assistants and executive secretaries, or anyone in an administrative or service-oriented role.

Overview: This one-day seminar covers the basics of the electrical systems used in the utility industry. Participants will learn to do the following: understand the natural laws of electricity; become more familiar with basic electrical terminology; know how electricity is generated, transmitted, and distributed; and be able to apply the knowledge of electrical principles to improve communications with internal and external customers.

MARCH 21, 2014 — SPOKANE, WASH.

FRONT LINE LEADERSHIP SESSION #5: SUPERVISING UNION EMPLOYEES

Who Should Attend: Operations directors, managers, line superintendents, labor relations professionals, and human resource managers who supervise union employees and deal with stewards and officers of the union.

Overview: The MARC Union-Labor Relations program increases the skills and confidence of front line supervisors to serve as management's front line representatives in dealing with employees, stewards, and officers of the union. The MARC program provides a well-organized format to produce uniform interpretation of the contract, rules, and policies, which reduces inconsistencies in dealing with employees. It also ensures that union procedures with proper documentation are consistently followed in handling grievances, providing job performance counseling, administering disciplinary action, and making job promotion decisions.

MARCH 25-27, 2014 — BEND, ORE.

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.

Overview: This is a regular meeting of the long-standing Environmental Task Force that examines environmental issues and the impact of current and proposed environmental regulations on electric utilities. This meeting occurs three times each year to review and discuss new and proposed regulations and issues facing each utility, and to hear from subject matter experts on key issues of the day, as well as from vendors with new technology or services. This is a premiere solution-focused, learning, and networking venue that brings utility, industry, and government environmental professionals together on a regular basis.

APRIL 7, 2014 — RENO, NEV.

NWPPA ENGINEERING & OPERATIONS CONFERENCE AND TRADE SHOW

Who Should Attend: Utility engineering and operations personnel, as well as those in information technology, safety, purchasing, environmental, accounting, communications, or any area where a more in-depth knowledge of engineering and operations would be beneficial.

Overview: This is an industry that rises to challenges and opportunities to provide safe, reliable, reasonably priced power to its customers on a reliable electric grid; therefore, it seemed only natural to have this year's theme be "Rally in Reno!" Given the theme, you can expect speakers, events, and a trade show that will inspire, inform, and celebrate the dedication and commitment we all share for our industry. With more than four days of learning events and activities scheduled, the NWPPA E&O Conference and Trade Show provides a mix of education, networking, and trade show experiences that can help with the opportunities and challenges that you face.

APRIL 7-11, 2014 — RENO, NEV.

ONLINE — HANDLING HIGH-BILL COMPLAINTS

Who Should Attend: Customer service professionals and anyone who interacts with customers about their utility bills.

Overview: High bills are the number one concern or complaint of all utility customers. This session will help representatives look at these types of complaints in a different light by understanding the human dimension to the complaint. You will explore the reactions that customers have, the level of customer knowledge, and the results that customers want. At the end of the session, participants should be able to respond to high-bill concerns in a more confident, knowledgeable, and personable manner.

APRIL 9, 2014 — ONLINE PRESENTATION

CONDUCTING PROPER WORKPLACE INVESTIGATIONS

Who Should Attend: Any supervisor or manager who may need to investigate employee complaints or workplace incidents.

Overview: This class will provide you with practical guidance and actual experience in evaluating a problem, deciding a course of action, conducting an investigation, and developing/maintaining effective documentation. You will work with other participants on real-life case studies to practice planning an effective investigation.

APRIL 9-10, 2014 — RENO, NEV.

NEW! INCREASING COLLECTION EFFECTIVENESS

Who Should Attend: Employees within the customer service, credit, and collections departments of public power utilities.

Overview: This course will look at how your utility has worked its collection processes for years and offer concrete suggestions on how to apply new tools and techniques to improve “this is how we’ve always done it.” Participants will learn how to fine tune their processes to improve customer relationships and leverage the latest technology to increase their revenue collection rates.

APRIL 15-16, 2014 — SEATTLE, WASH.

FRONT LINE LEADERSHIP #3: PERSONALITIES AND ATTITUDES IN THE WORKPLACE

Who Should Attend: Front line supervisors and managers that have completed *Front Line Leadership Session #1: Situational Leadership*, as well as those front line employees who will be transitioning to a supervisor or manager role in the near future and have completed *Front Line Leadership Session #1: Situational Leadership*.

Overview: This course, as taught by the Ken Blanchard Companies, begins with a self-discovery pre-workshop exercise to determine your personality type. The session continues with an explanation of how best to identify and deal with the different personality types you work with. Learn why it takes a different approach with members of your workgroup and how to bridge their temperaments to their developmental levels. Discover the leadership styles that work best with different combinations and learn to modify your approach to motivate and create a more productive and harmonious work environment.

APRIL 23-24, 2014 — COEUR D’ALENE, IDAHO

ELECTRIC UTILITY SYSTEM OPERATIONS

Who Should Attend: Any industry (utility or vendor) employee 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 employees.

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The art of writing management's discussion and analysis (MD&A)

Effectively writing management's discussion and analysis (MD&A) is an art of bringing together a common theme with analytical details. For many, this is an art that occurs only once a year and can be challenging to get a utility's story consistent to the readers of the financial statements. During the course of reading thousands of MD&As, we have accumulated what we perceive to be the challenges and best practices of writing this part of the financial statements.

The MD&A is a tool to introduce the financial statements. It is used to analytically describe the story of the utility. For cooperatives and other independent power producers, it is generally not required; however, we have seen it used more frequently as a best practice. For municipal utilities and stand-alone governmental reporters, it was introduced with GASB Standards No. 34; the intent was to provide more useful information to a wider range of users, and provide relevant and reliable information to knowledgeable users of the financial statements. There are many requirements of the MD&A, which can be found in GASB 34, but the underlying purpose is to provide an analysis of a utility's business, results of operations, and financial condition "through the eyes of management."

Common shortcomings to the MD&A include the following:

1. **Using a prior year's MD&A as a starting point.** This is the plug-and-play system that is commonly used. Using the prior year MD&A may save time, but the current year story and message may be significantly different than the prior year.
2. **MD&A information is repetitive of what is included in the financial statements.** This may not provide value-added content to the reader.
3. **Financial information is highly aggregated.** This can present difficulty in providing an adequate explanation of changes to the reader.
4. **Many different individuals are responsible for the preparation of the MD&A and financial statements.** This could result in the MD&A lacking a common theme and common source of information.
5. **Information presented in the MD&A does not agree or have linkage to the financial statements.** This results in confusion to the reader.
6. **Use of acronyms that are familiar to a utility may not be familiar to a reader.** This again results in confusion to the reader.



To help combat some of these shortcomings, we recommend the following best practices:

1. **Get out of the rut and start fresh.** Before starting to write the MD&A, plan out the theme and information that will be important to the reader.
2. **Provide top-down analysis.** Before getting to the details, make sure the reader understands the overall results, especially if the details are provided elsewhere in the financial statement.
3. **Explain why.** The readers can calculate the dollar and percentage changes to the financial statements, but they are more interested in the cause and effect of these changes. This is management's opportunity to explain what is changing in the utility.
4. **Assign responsibility to one individual for the entire MD&A.** This does not mean that one person should be responsible for creating the entire MD&A; it is extremely important to get other departments involved in drafting and confirming source information. However, ensuring a common theme and consistent writing style is important to get management's points across in a consistent and effective manner.
5. **Present information that is truly material.** Standards do not require a utility to describe every variance. Management should focus on those changes that are significant to the utility and truly explain why those changes are occurring.

6. **Use plain language.** Remember that readers of the MD&A may not understand all of the common acronyms and language of the utility business. As such, it is important for changes to be described in plain language, easily understood by all readers of the MD&A. Graphs and charts can be a useful aid in understanding complex situations.
7. **Add reader-friendly elements.** Use headings and sub-headings to break up lengthy text to aide users in finding pertinent information.
8. **Integrate reporting.** In order to bring together an annual report and have a consistent message from cover to cover, get the general manager/CEO and other management involved early in the process to identify key messages and themes.
9. **Compare information in the MD&A with other public disclosures.** This is to ensure consistency with other disclosures made throughout the reporting period.
10. **Involve a cold reader.** Utilize a cold reader who understands the changes in the utility, but who is not involved in drafting the MD&A. This reader can

assist in making sure a clear and consistent message is delivered to the readers of the financial statements.

The MD&A is generally the first thing readers of the financial statements will read and it should give them a clear picture of what occurred during the reporting period. MD&As should capture a reader's attention. They should also clearly and effectively communicate management's analysis to the readers of the financial statements; this is done by using clear language, a logical structure, and effective presentation. Writing an MD&A is a balancing act of providing relevant information without getting lost in the details. However, starting with a common theme and understanding the message that should come across to the readers of the financial statements will provide a utility with the means of communicating information effectively. **NWPPA**

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by Nora Doyle

Branching out: Tacoma Power uses the power of relationships to improve tree care



This Tacoma Power crew did a lot of special rigging, including using a 100-foot crane to take down a 120-foot tree that encroached on power lines. Photos provided by Tacoma Power.

In Hal Porter's 29 years as an arborist with Tacoma Power, he's discovered something surprising: when it comes to keeping power lines clear of branches, it's all about relationships. Porter encourages his team of tree trimmers to talk to customers directly, answer their questions, understand their tree needs, and share Tacoma Power's perspective.

"We want customers to have insight into our work practices," Porter said. "It helps them understand why we do what we do. Making sure a customer is empowered — that's an asset. As a result, they're more likely to give us access to their property when we need to trim in the future."

Porter, the 2010 winner of the Utility Arborist Award from the International Society of Arboriculture, knows of what he speaks. He helped develop Tacoma Power's tree-



Hal Porter, Tacoma Power arborist

trimming systems that keep foliage off power lines, thereby improving the reliability of the electrical system and ensuring public and employee safety.

"Hal is very knowledgeable about our entire system and the people we serve," said Tim Ross, Tacoma Power line maintenance supervisor. "People are really passionate about the trees on their property, and Hal understands that. He keeps customers happy and safe while keeping the reliability of the system secure. Otherwise, they're building fences and restricting access to our rights of way, which makes it more difficult for us to perform necessary maintenance."

Needed improvement

In the early 2000s, Tacoma Power's process for cutting trees back wasn't as defined as it is today.

"We were often chasing after problems rather than defining them," Porter said. "Our schedule wasn't as strong, and we often veered from it. As we identified our needs, we were better able to stay on schedule."

Today, Tacoma Power trims all circuits on a strict four-year and two-year cycle. Every four years, circuits are trimmed to clearance distances that will be safe until the next cycle. At the two-year point, the circuits are audited to identify faster-growing vegetation, which is then removed to ensure the clearances in Tacoma Power's work practices and standards are met. That amounts to about 750 circuit miles of trimming each year. The improved process has two great benefits. First, it reduces the amount of material removed on each cycle, which improves crew efficiency. The second benefit is that the trees look better, which helps with customer relations.

Tacoma Power also inspects its 230-kilovolt power lines quarterly to comply with Tacoma Power's Transmission Vegetation Management Program for NERC Standard FAC-003. As a result of the aggressive schedule — and adhering to it so strictly — Tacoma Power's system reliability has increased and the utility has passed two WECC audits with success.

The efforts to create and maintain today's defined program have been recognized by the National Arbor Day Foundation. Tacoma Power is a nine-time Tree Line USA Utility, which recognizes best practices in utility arboriculture.

Crews make it happen

While Porter sets the tone for the utility's vegetation management program, the tree crews are the people on the street every day, talking to customers, forming and keeping relationships that make the program so successful.

Part of the utility's credibility when it comes to vegetation management comes from those crews. In addition to Porter, Tacoma Power employs seven journey-level employees who have obtained arborist certification; three of them have further studied to achieve utility arborist certifications.

"When our customers talk to these certified arborists, they feel comfortable and confident with their advice," Ross said. "I'm very proud of them. They get their certification on their own time and pursue continuing education to maintain the certifications and improve their skills."

Employing arborists is a practice that Porter believes a lot of utilities are starting to see the value in.

"Our people and the relationships they form — that's what makes us really good," Porter said. "Our staff takes their work personally. Customers call us and ask for their tree guy by name."

The employees' willingness to complete special requests for the utility makes them even more valuable. Tacoma Power's arborists have been called on to do things like rappel down a dam to trim nearby trees, then raft down the river below to get safely back. Or top trees to set platforms for osprey nests in place. Both of those functions are critical to remain in compliance with FERC standards and hydroelectric licensing agreements.

In addition to three in-house crews, Tacoma uses up to six contract crews from the Asplundh Tree Expert Co. who are very familiar with Tacoma Power standards, service



A Tacoma Power tree trimmer rappels down a dam to get access to a tree he needs to trim.

area, and property owners. Those crews have been vital in keeping the cycle trimming on schedule.

Branching out

Over the years, Porter has been instrumental in educating the community about where to plant trees.

Empowering the public to understand the role the utility plays in tree care and how people can take care of their own trees is essential to a successful vegetation management program and reducing power outages, Porter believes. To that end, he has created or promoted programs and activities that educate customers. For example, he took a small Arbor Day program and transformed it into the TREE-mendous Program, through which local students submit artwork based on the theme of trees and power lines.

"Education is key," Porter said. "Eventually, these kids will be the owners of the homes where we're trimming, so what we do today to teach them about trees will reduce problems with trimming in the future."

He also developed the Small Tree Arboretum, where the public can view and learn which trees grow well in this climate and are safe to plant near power lines. He also developed an avenue — a direct phone and email — for customers to reach arborists directly at Tacoma Power when they feel they have a tree problem in their yard or might need a tree removed. He also teaches classes on tree selection and pruning at the City of Tacoma's green demonstration house.

"We work hard up front and it pays off later," Porter said. **NWPPA**

Nora Doyle is a communication and marketing strategist at Tacoma Public Utilities in Washington. She can be reached at either (253) 502-8117 or ndoyle@ci.tacoma.wa.us.

by Steve Klein

Avoiding extinction by following the principles of public power

I recently served as a utility industry panelist at a conference where I introduced myself as a living, breathing dinosaur. It was not my intent to imply that I was really old, or not hip to the latest trends. Rather, I was making the point that this description was now being applied to electric power utility executives.

Citibank published a report titled “Energy Darwinism” that led industry analyst Jesse Berst to coin the prophetic phrase “Utilities are Dinosaurs Waiting to Die.” The original report argues that the utility industry’s dismissive attitude toward disruptive technological changes mirrors that of those who failed to recognize the game-changing impact of the Internet and cell phones. The report suggests that today’s electric power utilities could lose a substantial portion of their market to energy efficiency, solar, and other distributed generation technologies. Citibank further emphasized that history tells us such changes are never gradual.

Earlier this year, Marlene Motyka, an alternative energy advisor for Deloitte LLP, wrote an op-ed titled, “Why We Should Pity Utilities.” She highlighted the fact that utility “companies are caught in a vise: squeezed by simultaneously rising expenses combined with falling demand for electricity.”

Motyka was only addressing a portion of the vise. To complete the entire squeeze play, you also have to factor in legislative and regulatory pressure on utilities to fund large expansions of the nation’s transmission grid, as well as renewable portfolio standards, to ultimately promote large-scale commercial wind and solar development that likely will only add to the oversupply problem.

As I write this I am reminded of a clean tech venture capitalist who served with me on a panel that was charged with helping the previous governor of Washington establish a state energy strategy. Every time I made what I thought was an insightful comment from the utility perspective, he would whisper sarcastically to me, “Spoken like a true power company executive.” The electric utility industry is being accused today of resisting consumer demands by protecting its traditional business model in much the same way that Ma Bell sought to maintain control of its big black rotary telephone. Are we simply protectionists or dinosaurs that don’t want to adapt and accommodate technological advancement? Are we irrationally trying to preserve our version of the rotary phone?

I don’t want to be perceived like Ma Bell, but I do believe there are foundational elements of our industry that were put in place years ago and have served the nation and its citizens well. Unlike other parts of the world, everyone in America has

The electric utility industry is being accused today of resisting consumer demands by protecting its traditional business model in much the same way that Ma Bell sought to maintain control of its big black rotary telephone.



access to safe, reliable, and affordable electricity at the flick of a switch. On the other hand, I would argue that we must adapt to the changing needs of our customers even if that means facilitating the application of new technologies that threaten our traditional business model.

I believe the best strategy going forward also happens to reflect my view of where we are heading as an industry. First of all, conservation and renewables are a legacy of the Pacific Northwest and should continue to be the first and foremost tools in our tool belt. As public utilities, we need to lead the way in making sure our communities are economically and ecologically sustainable through wise and efficient use of resources. Consumer-owned utilities do not exist merely to sell kilowatts and return generous cash dividends to detached shareholders; our dividends are evident through our unique values of local control, economic development, environmental and community stewardship, and overall quality of life. Public power utilities will have to become more creative to continue to be able to sustain strong conservation programs despite flat or declining energy load.

Utilities should also embrace the fact that a growing number of their customers want to avail themselves of distributed resources such as solar. We should develop community-based programs to educate and assist those who want to participate directly in supporting local renewable generating sources. Such programs can provide education and appropriate incentives as well as promote local economic development, similar to the many successful public power conservation efforts.

Rather than simply saying “no” to those in your community who look to the local utility for guidance, you should find ways to say “yes.” You can structure your program and rate design to address the potential revenue and nonparticipating impacts. I don’t expect distributed generation to grow as fast and have as large an impact in the Northwest as other parts of the country because of our comparatively low retail rates and underlying renewable resource base made up of non-carbon-emitting hydro. Resistance is not the best approach; it is better to work with customers, legislators, and

regulators to meet this growing consumer interest. Our proactive stance will position us to better influence the solutions to adequately address reliability, safety, and economic impacts.

I see our role as power utilities changing over the ensuing years, but I also see certain fundamental aspects remaining unchanged in terms of utilities remaining mass market service providers. The grid system will become more and more complex, developing a multitude of interfaces with variable distributed generation as well as innovative service offerings and pricing schemes ranging from demand response to energy storage. This represents a challenging area upon which all electric utilities should be strategically focused. More buildings will become smart; they will have their own generating sources and energy management systems, and will be able to communicate on a real-time basis. The local distribution utility will still provide some level of central station generation, but it will be supplemented by local distributed generation as well as strategically sited utility- and customer-owned energy storage.

I think lots of people are interested in environmental sustainability and are willing to have a passively managed solar

panel on their roof, but most consumers are not interested in becoming experts and committing the time necessary to effectively manage inverters, batteries, communications protocols, etc. That's where the local utility comes in. We can provide a smart grid system that has the ability to balance and optimize all of the inputs and outputs to ensure that each customer has the energy they need when they need it.

We can no longer be satisfied with our form of Ma Bell's black rotary dial phone, which is represented by an unsophisticated, one-way electric system highway. We cannot ignore the interests of our customers, who are demanding technological change and the provisioning of new services. With change comes opportunity, and I believe public power is well positioned to lead the way to the future utility service model, rather than going extinct like the brontosaurus and the black rotary telephone. **NWPPA**

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Emerald PUD's PowerSync Program comes to a close



On March 31, 2013, Emerald People's Utility District (Emerald PUD) sent the final signal to residential demand response devices asking that they turn their communications off for good. We thanked them for their service to the cause of demand response in the Pacific Northwest and their radios blinked for the last time. Along the nearly three years of the PowerSync pilot program, Emerald learned some important lessons about communicating demand response issues, estimating the residential demand response potential in our service area, and developing tools for evaluating future opportunities.

"Going into the project, there were a lot of questions. I think the pilot has helped Emerald better understand the resource potential, the costs involved, and most importantly, how our customers feel about demand response," said Power Manager Kyle Roadman.

Emerald is at the end of a pilot program that officially began on June 7, 2010, with Bonneville Power Administration's offer to award a portion of its funding for residential demand response pilot projects to the utility. Creating a demand response program from nothing more than the desire to learn required big investments from many parts of the utility: Public Relations generated fabulous outreach materials with original look, feel, and messaging for PowerSync; Customer Service stepped up to learn about demand response to efficiently and effectively offer assistance to enrolling customers; and Metering allowed the program to utilize the advanced metering infrastructure (AMI) system to collect extensive load profile data for evaluating the effectiveness of the pilot.



Emerald Energy Services Coordinator Rob Carrier holds a PowerSync water heater device similar to the ones used in the PowerSync Program. All photos provided by Emerald PUD.

In the end, we were able to engage over 620 customers about the benefits and limitations of demand response. Like in energy efficiency, a customer-utility relationship is critical to securing the resource behind the customer's meter, but instead of energy savings, the utility is looking for demand savings. While the difference is subtle, it can make for challenging conversations with customers. Emerald has been having the energy efficiency conversation with customers for a long time, but we found some of the themes in demand response can be different and unfamiliar to customers. For example, demand response does not reduce energy use, it shifts energy use. Demand response should not impact your day-to-day com-

In the end, Emerald managed to address its original research questions and goals by utilizing our existing AMI system. We explored demand response as a future cost-saving measure for the utility, learned extensive lessons about customer attitudes on demand response, and determined the near-term for residential demand response.

fort, but if a customer is concerned about the potential impact, they can opt out. And, lastly, demand response devices are the property of the utility during the program, and therefore the utility is held responsible for the continued worry-free operation of the connected appliance. All of these issues were unexpected communications challenges that the pilot allowed Emerald to evaluate and eventually resolve.

After connecting with an initial group of interested customers, about 225 households were selected to receive 200 water heater switches and 100 communicating programmable thermostats. The equipment and software used were from Cooper EAS. There was a \$10 enrollment bonus and the incentive of keeping the device following completion of the pilot. There was no other incentive to participate — no ongoing billing credit, no per-event reimbursement, etc. — so we hinged our marketing messages around the concept of one's actions making a difference for the community. We worked with an independent contractor that also gained demand response experience working in other utility pilots. This was a good win for the pilot, too, in that it helped set the ground work for the installation service providers that may be required to fully realize a robust demand response infrastructure in the Northwest. These installers helped us place 20 data-logging units in the field to assess the demand reduction potential from various demand response events.

After running 19 simulated demand response events, we have a reasonable per-unit number to use when planning for the residential demand response potential in the service area. We based this number off of literature review and data logger information generated during the pilot. We also utilized hourly AMI data to help predict energy usage during demand savings events and compared it to measured data from the data loggers. For residential water heaters, we believe each connected unit represents 1.25 kilowatts in potential demand savings and each electric heat pump represents about 1.0 kilowatts. With this in hand, along with loads of data about program cost and help from Cooper EAS, Emerald was able to develop a reliable cost-effectiveness model to estimate the costs/benefits from the program. This was a major goal of the pilot, and an excellent planning tool to have in place.



About 225 participating households received the above PowerSync Welcome Kit.

Following the early bumps in the program development, the demand-savings events went off with little fanfare. Customer impacts were negligible and though we offered the option to decline participation in any event, we only had one customer during one event take that option. By far the biggest lesson has been the amount of ongoing maintenance required for the utility that installs and runs a demand response program. The devices themselves will require periodic maintenance, but more importantly a customer holds the utility responsible for the end-use appliances with which the devices are connected. The result is a large volume of calls regarding faulty water heaters and heat pumps that the program isn't responsible for directly, but the utility cannot just leave the customer high and dry. The effort and cost for this issue was underestimated.

In the last year of the pilot, Emerald engaged its Resource Advisory Citizens Committee on many issues facing the utility, including overall demand side management. Its input solidified demand response as a potential solution to future capacity constraints, but interestingly, the committee recognized the importance of conservation in dealing with capacity shortages. This is Emerald's strategy for the time being: emphasizing conservation measures to help reduce peak demand, while keeping traditional demand response as a future option when more severe shortfalls or better defined benefits are known for the utility.

In the end, Emerald managed to address its original research questions and goals by utilizing our existing AMI system. We explored demand response as a future cost-saving measure for the utility, learned extensive lessons about customer attitudes on demand response, and determined the near-term for residential demand response. **NWPPA**

Rob Currier is the energy services coordinator at Emerald PUD in Eugene, Ore. He can be reached at rob@epud.org.

Flathead employees credited with saving life



(L-R) Chad Bessette, Chuck Johnson, Darlene Hill, Travis Tennison, and Doug Tu. Photo provided by Flathead Electric Cooperative.

On October 7, Ferndale resident **Darlene Hill** was returning to her home when she began to feel lightheaded. As she approached her driveway, she got out of the car to get the mail, but passed out and fell to the pavement. When she started to come to, she saw a co-op truck coming down the road and managed to prop herself up a bit and wave her arm. Fortunately, Flathead Electric Cooperative (Kalispell, Mont.) employee **Chuck Johnson** noticed the gesture and immediately went to her aid.

Johnson found Hill lying in a pool of blood. He started to call 911 but saw a recent cellphone message from coworker **Doug Tu** and hit call back then relayed the information to him. "Doug knew where we were, so he contacted emergency responders while I tended to the injured woman," said Johnson.

Two other FEC employees working in the area also responded to the scene. While Johnson comforted Hill and tried to keep her in a stable position, **Travis Tennison** grabbed sterile gloves and clean towels from the back of his truck to suppress the bleeding wound, while **Chad Bessette** cleared the area of obstacles for arrival of the ambulance.

Doctors quickly determined that Hill suffered a heart condition and within an hour of arrival at the hospital, underwent surgery to receive a pacemaker. They later told the family that Hill was "minutes from death" when she arrived and credited the FEC employees as instrumental to saving her life.

Nancy Fleming, Hill's niece, said in a letter to the cooperative, "We are writing this letter to let you know how eternally grateful we are to these men for stopping and helping, when no one else did. I am writing this letter on behalf of our entire family, especially her four sons, grandchildren, and great grandchildren. Thank you for having such capable and caring employees." **NWPPA**

Hall elected to lead Benton PUD Commission

Benton PUD (Kennewick, Wash.) Commissioner **Jeff Hall** has been elected president of the Benton PUD Commission for 2014, while **Lori Kays-Sanders** has been elected vice president and **Barry Bush** has been elected

secretary. Hall became a commissioner for Benton PUD in January 2002.

Benton PUD is directed by a three-member board of commissioners elected by citizens of Benton County. Each commissioner represents a different sector of the county and serves a six-year term. The election of officers takes place annually. **NWPPA**

ORECA elects 2014 officers

The Oregon Rural Electric Cooperative Association (ORECA) Board of Directors elected new officers for the 2014 Executive Committee as part of ORECA's annual meeting on December 3-5, 2013, in Salem. Central Electric (Redmond) CEO **Dave Markham** was re-elected as ORECA president for a second term.

Additionally, Lane Electric (Eugene) Director **Chris Seubert** was elected vice president and Umatilla Electric (Hermiston) Director **Bob MacPherson** will continue as secretary/treasurer. Salem Electric Director **Alicia Bonesteale** and Wasco Electric (The Dalles) Director **Bob Durham** were elected to the two Executive Committee at-large positions. Consumers Power, Inc. (Philomath) CEO **Roman Gillen**, as immediate past president, is also a member of the Executive Committee. **NWPPA**

Shiroma elected SMUD Board president

Sacramento Municipal Utility District (Calif.) Director **Genevieve Shiroma** was elected president of the SMUD Board of Directors. Her term as president will run from January through December 2014.

Shiroma was first elected to the SMUD Board of Directors in November 1998 to represent Ward 4. She served as president of the board in 2002, 2006, and 2010.

Shiroma serves on the Agricultural Labor Relations Board to which she was first appointed by the governor of California in May 1999. Prior to her appointment, she worked for the California Air Resources Board for more than 20 years. During that time she worked on air quality regulations and programs to identify toxic air contaminants and reduce air pollutants from power plants, consumer products, landfills, hazardous waste disposal, pesticide use, and other industrial sources. She last served as chief of the Air Quality Measures Branch.

A native of Acampo, Shiroma is married and lives in Curtis Park. She volunteers in the community, currently serving on the Board of United Way California Capital Region. Shiroma graduated from the University of California, Davis, with a bachelor's degree in material science and engineering.



NWPPA

Knudsen Obermeyer joins Lane Board

On December 12, the Lane Electric (Eugene, Ore.) Board of Directors appointed **Susan Knudsen Obermeyer** to fill a vacancy on the board for the Oakridge District.

The board vacancy occurred when **Jim Hill**, a long-time board member for Lane Electric, recently retired from his position after 39 years of service. Hill formally announced his retirement prior to Lane Electric's annual meeting on October 28.

Knudsen Obermeyer comes to Lane Electric after a long career with the Forest Service; she recently retired as the staff officer of operations. During her tenure with the Forest Service, Knudsen Obermeyer was responsible for Timber, Special Forest Products, and Silviculture.

No stranger to service, Knudsen Obermeyer brings 30 years of volunteering and board experience to the position. She served 12 years on the Oakridge School Board and held the position of board chair; and coordinated and organized Oakridge's Mini-Olympics, Outdoor School Program for students, and the Senior Citizen's Christmas Basket effort in Oakridge. During her time with the Forest Service, Knudsen Obermeyer also served as treasurer for the Forest Service Union. **NWPPA**



Shetler named BANC general manager

On December 9, **Jim Shetler** succeeded **Jim Feider** as the new general manager of the Balancing Authority of Northern California (BANC). Feider retired on December 15 after serving as general manager of BANC since September 2011.

Shetler's resumé boasts more than 40 years in the utility industry, including more than 27 years at the Sacramento Municipal Utility District (SMUD). Shetler retired from SMUD in 2011 as assistant general manager of Energy Supply, but currently serves as an executive advisor at SMUD.

"I am honored to be appointed BANC's general manager," said Shetler. "I look forward to working with our members to deliver on BANC's mission to provide reliable power at the best possible value for our member-utilities and their customers."

Shetler's career at SMUD started at the Rancho Seco nuclear generating station. Prior to his appointment as head of Energy Supply, Shetler served for three years as assistant general manager of Customer Services.

BANC is a joint powers authority (JPA) consisting of SMUD, Modesto Irrigation District (MID), Roseville Electric, and Redding Electric Utility. **NWPPA**

EWEB devotes extra \$660,000 to help customers

Following three weeks of uncommonly cold weather, the Eugene Water & Electric Board (Ore.) will devote an additional \$660,000 to its low-income assistance program to lend a hand to customers in need.

The extra \$660,000 in low-income funding is on top of the \$1.7 million the utility budgets at the start of each heating season to help those who meet income eligibility guidelines, and also customers who have lost their jobs. Customers who have lost their jobs and are receiving state unemployment benefits can receive a \$200 bill credit, regardless of income.

EWEB is taking additional steps to help customers impacted by the extremely cold weather. Low-income customers who received bill-payment assistance last year received notification in the mail that EWEB has automatically credited their accounts the normal \$200 annual assistance. This expedited assistance for nearly 3,400 households, rather than requiring those customers to re-apply for assistance. **NWPPA**

Bingaman, Galloway achieve NRECA credentials

Two OTEC (Baker City, Ore.) Board members were recognized at the National Rural Electric Cooperative Association's (NRECA) Region 7 and 9 in Portland, Ore., in October for their commitment to education and to the cooperative model. Union County Director **Austin Bingaman** earned his Credentialed Cooperative Director (CCD) Certificate, and Union County Director **George Galloway** earned his Board Leadership Certificate (BLC).

Today's electric utility environment imposes new demands on electric cooperative directors, particularly increased knowledge of changes in the electric utility business, new governance skills, and a working knowledge of the cooperative principles. OTEC Board members have a commitment to work through NRECA to sharpen this body of knowledge for the benefit of their electric cooperative consumer-owners. **NWPPA**

Chelan brings two generating turbines back online

With recent temperatures dipping into the single digits and the demand for electricity throughout the region peaking, word that Chelan County PUD (Wenatchee, Wash.) has been able to bring two of its generating units back online early was good news for the District's customers last month.

"Unit C6, one of our smaller generating units at Rocky Reach, has been out of service since August 14 for scheduled maintenance. The repairs to this unit are not related to the repairs that have taken our four largest generating units (C8 – C11) out of service," said **Kirk Hudson**, Generation and

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Transmission managing director. “Utility crews and our contractor worked very hard to get C6 back in operation early particularly since our four large generating units have been out of service due to a design defect.”

In addition to the four large units and one smaller unit at Rocky Reach Dam that were out of service, unit B6 at Rock Island Dam was taken out of service for engineering tests and brought back into operation on December 5. By having units C6 and B6 back in operation, the utility is able to capitalize on better energy market prices as well. **NWPPA**

Alpine to lead PCWA Board

On December 9, the Placer County Water Agency (Auburn, Calif.) Board of Directors elected District 5 Director **Joshua Alpine** of Colfax to serve as 2014 chairman of the board. Alpine, a former mayor and long-time city councilman in Colfax, was elected by voters to the PCWA board a year ago. He served as vice chairman in 2013.

District 2 Director **Primo Santini** of Lincoln was elected as 2014 vice chairman. He is a former mayor and councilman with the City of Lincoln and was appointed to the agency board this past June upon the retirement of **Alex Ferreira**.

Also serving on the five-member governing board are Division 1 Director and Outgoing Board Chairman **Gray Allen** of Roseville, District 3 Director **Mike Lee** of Loomis, and District 4 Director **Robert Dugan** of Roseville. **NWPPA**



(L-R) Incoming 2014 PCWA Board Chairman Joshua Alpine recognizes the service of outgoing 2013 Chairman Gray Allen. Photo provided by PCWA.

Member utilities set 2014 budgets

Following recent public hearings, Grant PUD (Ephrata, Wash.) commissioners approved a \$247.4 million budget for 2014 during their regular business meeting on November 12, 2013. The budget includes significant dollars for capital projects associated with the PUD’s federal license and aging equipment. Some of this work includes generator replacements at Wanapum Dam; hatchery site improvements and construction; recreation site enhancements; and ongoing electric system reliability improvements.

On Thursday, November 21, directors of the Placer County Water Agency (Auburn, Calif.) adopted a combined 2014 calendar year budget of \$90.8 million. The combined budget includes a Water Division budget of \$53.3 million, a Power Division budget of \$33.3 million, and an agency-wide budget of \$4.2 million. PCWA customers will see an average water rate increase of 9.1 percent in 2014, followed by a 3.7

percent increase in 2015. Adjustments for inflation are planned in 2015-18.

Mason County PUD No. 3 (Shelton, Wash.) commissioners adopted a \$62.1 million budget for 2014 on November 26; the budget reflects higher prices for wholesale electricity supplies and transmission services purchased from the Bonneville Power Administration (BPA). The 2014 PUD 3 budget is five percent higher than 2013 (\$3 million). Included in the 2014 budget, the new prices for PUD 3 service are 6.52 cents per kilowatt-hour for electricity and the system charge will be 80 cents per day.

On December 2, Chelan PUD (Wenatchee, Wash.) commissioners approved the budget for 2014 that forecasts the utility will end next year with a combined positive bottom line of \$85.5 million. Total spending is forecast at \$226 million, including capital expenditures for major projects of \$51.8 million. Plans are to reduce long-term debt by another \$82 million, or about 10 percent, to \$735 million, which is ahead of earlier debt reduction targets.

The Sacramento Municipal Utility District (Calif.) Board of Directors approved a \$1.4 billion budget on December 5. The commodities portion of the budget — the cost of natural gas to fuel power plants, wholesale power purchases, and transmission — is \$506.8 million for next year, about half of the total operations and maintenance budget and a slight decline from 2013. The capital budget, which covers additions and improvements to buildings, property, and equipment, is \$227.5 million, up from \$180 million in 2013. The portion of the 2014 budget earmarked for the low-income Energy Assistance Program Rate is \$46.7 million, an increase of four percent over 2013.

At its December 17 meeting, the Columbia River People’s Utility District (St. Helens, Ore.) Board of Directors approved a \$32.9 million Operating and Capital Budget for 2014. No changes to electric rates are expected. The 2014 overall budget is one percent less than the 2013 budget; controllable expenses of \$10.3 million are 5.8 percent lower than in 2013. Overall operating revenues are projected at \$29.0 million for 2014 on estimated energy sales of 470,600 megawatt-hours, an increase of \$684,000 over 2013 levels. **NWPPA**

BPA wins Platts Global Energy Award

The Bonneville Power Administration’s (BPA) development of the most sophisticated synchrophasor network in North America landed the agency its first ever Platts Global Energy Award, the most coveted award in the energy industry.

Platts presented its awards at a special ceremony at the Waldorf



Larry Bekkedahl, senior vice president of Transmission Services, accepted the award on behalf of BPA. Photo provided by BPA.

Astoria in Manhattan, N.Y., on December 12. A panel of judges selected this year's winners — five industry executives and 15 companies — from more than 200 nominations from organizations across eight countries and three continents.

"It's a tremendous day for Bonneville," said **Larry Bekkedahl**, senior vice president of Transmission Services, who accepted the award on behalf of BPA. "And I'm so proud of our team that worked hard for so many years to make this happen. This is definitely a fall on your knees moment."

BPA was a finalist in two categories this year. First, BPA was among nine finalists for the Industry Leadership Award for Grid Optimization, which included AutoGrid Systems, Inc, BC Hydro, CenterPoint Energy, ENBALA Power Networks, Midcontinent Independent System Operator, PacifiCorp, PJM Interconnection, and Silver Spring Networks. For the second category, BPA's Energy Smart Industrial program was a finalist for Platt's Stewardship Award for Efficiency Initiative (Energy Supplier) along with DTE Energy, Gulf Power, Rocky Mountain Power, San Diego Gas & Electric, Tacoma Public Utilities, Toronto Hydro-Electric System, and eventual winner Constellation. **NWPPA**

WPUDA announces 2013 award recipients

The Washington Public Utility Districts Association (WPUDA) presented its annual awards recognizing the outstanding dedicated service and commitment of individuals serving PUDs at the organization's Annual Conference on December 5, 2013, in Airway Heights, Wash.

WPUDA awarded two lifetime achievement awards this year. The award is the highest honor of the association.

Douglas County PUD Commissioner **Lynn Heminger** was presented with the award for his exceptional leadership, dedication, and advocacy work on behalf of public utility districts. Heminger has served on the Douglas County PUD Board of Commissioners since 1991 and has served as president and vice president during his 23 years on the board. Recently retired Mason County PUD No. 1 Director of Operations **Tracy Colard** also received the Lifetime Achievement Award for his skills, knowledge, innovation, and leadership during his 43-year career in the utility industry. Colard began his career at Grays Harbor PUD before moving to Mason County No. 1 PUD in 2003 as the director of operations.

Grant County PUD employee **Susy Anderson** received the William T. Elmgren Public Service Award in recognition for her work in support of the American Cancer Society and the Relay for Life. The award, which pays tribute to more than 50 years of service contributed by former Clark County PUD Commissioner **William T. Elmgren**, is presented to a full-time



Lynn Heminger

PUD employee who exemplifies PUD commitment and involvement in his or her community. The recipient receives a plaque and a \$250 contribution is made to a local charity chosen by the recipient.

Mason County PUD No. 3 Meter Reader **Vince Campagna** was honored with the association's Good Samaritan Award. The award is presented to a PUD employee or employees who have demonstrated meritorious action in a life-threatening situation. Campagna witnessed a head-on collision that occurred immediately in front of him on February 13, 2013, on a high-traffic and dangerous stretch of roadway. He parked his vehicle to block traffic, put on his flashers, exited the vehicle while waving his arms to alert motorists, and put up the reflective signs that are carried in PUD vehicles. He then noticed a fire had broken out in one of the vehicles and asked a driver of a nearby sand and gravel truck to get his extinguisher and begin putting out the fire. Campagna controlled traffic until first responders arrived at the scene. After the accident, Campagna arrived at the PUD office ready to go back to work. A passer-by contacted the PUD the following day and commended Campagna for his service. **NWPPA**

Energy Northwest announces two new directors

Washington Gov. **Jay Inslee** recently appointed **James Moss** to the Energy Northwest Executive Board and Seattle City Light recently appointed **Mike Jones** to the Energy Northwest Board of Directors.

Moss is the director of Energy with the United Association (UA) of Journeymen and Apprentices of Plumbing and Pipefitting of the U.S. and Canada. Its headquarters are located in Annapolis, Md. The UA includes more than 300 local unions representing 370,000 plumbers, pipe fitters, sprinkler fitters and service technician members.

Moss has a distinguished career with unions that started in 1978 as an apprentice steamfitter. He has advanced through many positions at the local union level as well as the international union level including journeyman, business agent, business manager, recording secretary, vice president, president, and chairman.

Moss's term became effective on November 12, 2013, and will run through June 2014.

Jones was recently hired as Seattle City Light's new power supply and environmental affairs officer. In this role he



James Moss



Mike Jones

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provides leadership and strategic direction to support the utility's mission. His appointment became effective on October 11, 2013.

Most recently, Jones owned his own business, CEO Focus, in Jacksonville, Fla., which provided executive coaching, and management and technical consulting services to non-profit and energy industry organizations. Prior to that, he spent 12 years with The Energy Authority in both Jacksonville and Bellevue, Wash., where he performed risk analysis for municipal utilities, risk management, power management, and enterprise operations. He began his career as an officer with the Navy stationed in Norfolk, Va. **NWPPA**

Higgins, Babcock receive 20-year service award

During the October 7, 2013, Douglas County PUD Commission meeting at the East Wenatchee, Wash., office, PUD Commissioners Lynn Heminger, Ron Skagen, and Jim Davis awarded Purchasing Agent **Bob Higgins** with his 20-year service award. Higgins thanked the commission and said he appreciated the opportunity to work for the PUD. "It has been an excellent place to work and I work with great people," he said.

During the November 12, 2013, meeting, the three commissioners presented another 20-year service award, this time to Project Electrical Foremen **Steve Babcock**. Babcock thanked the commission and talked about the work he is doing at area substations.

NWPPA



Bob Higgins



Steve Babcock

Gott, Kostick named to APPA Policy Makers Council

Last month, the American Public Power Association (APPA) named Mason County PUD 3 (Shelton, Wash.) Commissioner **Linda Gott** and Public Utility District #1 of Lewis County (Chehalis, Wash.) Board President **Ben Kostick** to its Policy Makers Council. Gott will serve a one-year term, and Kostick has been named to a three-year term.



Linda Gott

Gott was elected to the Mason County PUD 3 Board of Commissioners in 1999, and is in her third six-year term. She has served in a variety of leadership roles with Pacific Northwest utility trade groups and on boards for public power consortiums. She is the first woman elected to the PUD 3 Commission in its nearly 75-year history.

Kostick is a certified public accountant in Lewis County and is active in community affairs, including Twin Cities Sertoma Club and acting treasurer for WPUDA.

The 40-member council assists APPA in promoting federal legislation that is important to public power utilities, and works to protect utilities from harmful legislation. It also provides advice on other issues of importance to the national organization. Members of the APPA Policy Makers Council are appointed from 10 geographic regions and include at-large representatives. Its members serve on utility boards or are elected officials in public power communities.

NWPPA

OPALCO Board supports broadband acceleration

In November in front of a packed room at their regularly scheduled meeting in Friday Harbor, Wash., the OPALCO Board issued and approved the following motion: "Our island communities are suffering economic damage and safety issues caused directly by inadequate phone and Internet infrastructure. Therefore, OPALCO shall accelerate expansion of our local member-owned, robust, and reliable high-speed data infrastructure to provide Internet, phone, and emergency communication services to our members. Deployment will be supported and funded by OPALCO assets, including equity and rates."

"In light of the current situation, OPALCO plans to take action," said Assistant General Manager **Foster Hildreth**. "Our infrastructure is a member-owned resource. Members pay for it through their rates. If members — including individuals, businesses, Internet service providers, institutions, etc. — can benefit from greater access to this resource, then we will make it available where possible."

The moratorium on new connections through OPALCO's Island Network subsidiary will remain in place until OPALCO has developed the necessary elements for calculating the cost in aid of construction (CIAC) that would be required of members to connect. However, for members who are already very close to existing fiber optic lines — especially in the village and town centers — OPALCO plans to begin the CIAC estimation process soon and to begin making connections through Island Network fairly quickly. **NWPPA**

Edwards to lead Black & Veatch

On November 27, 2013, Steve Edwards became the new chairman, president, and CEO of Black & Veatch, succeeding Len Rodman. The formal transition occurs as Rodman retires from Black & Veatch after 42 years with the company and 15 years as CEO. During his tenure, the company further positioned itself as a world leader in Critical Human Infrastructure™ solutions.



In April, Edwards was named chief operating officer of Black & Veatch and to the company's top leadership position following a transition period concluding on November 27.

"During the transition process, Steve led the company's strategic planning initiative and the 2014 budgeting process. In addition, he met with clients, business partners, and company professionals all over the world in preparation for his new role," Rodman said.

Edwards becomes the seventh person to serve in the top leadership position in the company's 98-year history.

Before becoming COO, Edwards was an executive vice president serving as executive director global EPC for Black & Veatch's energy business. He has been a member of the company's executive committee since 2005 and a member of the board of directors since 2012.

Black & Veatch is an employee-owned, global leader in building Critical Human Infrastructure™ in energy, water, telecommunications, and government services. Follow them on www.bv.com and in social media. **NWPPA**

ESCI welcomes Pollom, Verdecchio

In November, Brian Pollom joined ESCI with more than 39 years of international utility experience covering all aspects of utility management, technical, and business development. He is recognized as an international subject matter expert of the AMI/AMR/grid technology industry with over 17 years of experience involving electric and gas metering technology deployments, operation, and business case initiatives. His expertise also includes 22 years of management and engineering expertise in electric utility operations, maintenance, and construction. He holds a Bachelor of Science in electrical engineering from the University of Washington.

In December, Tom Verdecchio also joined ESCI. Verdecchio has more than 43 years of electric utility safety and training experience, and live-line transmission experience. He was an integral team member for development and leadership of Public Service Electric and Gas Company's

(PSE&G's) New Jersey Live-Line Group for more than 15 years. He was the lead team member responsible for the development of PSE&G's live-line maintenance techniques that have significantly reduced PSE&E's transmission O&M costs. Verdecchio has been a member of the IEEE/ESMOL Subcommittee for 15 years. He is also a member of the U.S. National Committee of the IEC (International Electro-Technical Commission) and a committee member of the American National Standards Institute (ANSI).

ESCI was founded in 1990 to provide safety courses for electrical utility workers. Since then, ESCI has developed a staff of 12 (and still growing) nationally recognized professionals providing a complete package of services. For more information, visit <http://esci.net/index.html>. **NWPPA**

Ruralite welcomes McKoy-Noe

Last month, Ruralite Services announced that Megan McKoy-Noe will be joining the Ruralite Services team on February 3. She will serve in the new role of director of strategic communications and marketing.

McKoy-Noe comes to Ruralite Services after serving as NRECA's senior consumer communications advisor, and member and community engagement representative. She brings a wealth of electric utility experience at the local level as well as her national experience, having served as assistant director of Communications & Member Relations at GreyStone Power in Georgia for nearly seven years. You can view a short video from her on the Straight Talk YouTube channel at <http://youtu.be/MaWLLimp10>.

In her new role, McKoy-Noe will lead an outstanding group of Ruralite Services professionals, serving members with strategic communication planning; digital and social media efforts; and much more.

Ruralite Services provides more than 60 electric cooperatives, people's utility districts, and municipalities with high-quality service and communication resources tailored to meet their needs. For more information, visit www.ruralite-services.org. **NWPPA**

Tantalus, Itron chosen by Inland

On December 19, 2013, Tantalus, a leading provider of real-time smart grid communications, and Itron Inc., a world-leading provider of technologies that help utilities measure, manage, and analyze energy and water, announced that Inland Power & Light (IPL) has selected a Tantalus-Itron solution for public power to provide advanced metering infrastructure (AMI) and smart grid services for the approximately 39,000 members in its cooperative in eastern Washington and northern Idaho. The fully integrated TUNet® — Tantalus Utility Network — platform will serve as the core foundation for IPL to deploy Itron

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AMI-ready meters to facilitate the use of advanced applications such as automated metering, interval meter data collection, prepay, and power quality management.

This project is a joint effort between Tantalus, Itron, and General Pacific, one of the leading wholesale stocking distributors in the Pacific Northwest. IPL will utilize the newly released TUNet-enabled CENTRON® II electric meters for their deployment. This high-performance residential meter will deliver granular meter data to TUNet applications which will enable IPL to immediately utilize features such as interval meter reading, remote disconnect/reconnect, and power diversion management.

Itron is a global technology company that builds solutions that help utilities measure, monitor, and manage energy and water. Join us in creating a more resourceful world; start at www.itron.com.

Tantalus provides two-way, real-time data communications networks to monitor and control electric, gas, and water utilities. For more information, please visit www.tantalus.com. **NWPPA**

AirGenerate ATI66DV available via Ecotone

Ecotone Products, LLC continues its path of making the most advanced energy-efficient water heating technologies commercially available to home performance contractors, plumbers, HVAC contractors, and utilities. Ecotone Products is a leading distributor of water conserving and energy-efficient green building products, and is now stocking advanced engineered AirGenerate ATI66DV direct vented heat pump water heaters. AirGenerate direct vented heat pump water heaters carry the promise of minimizing energy use for electric water heating, while providing maximum homeowner comfort.

The AirGenerate ATI66DV water heater is the first commercially available heat pump water heater that allows for the installation of an air intake duct as well as an air exhaust duct. An air intake duct allows for the installer to connect a duct from the unit to the exterior of the home. This means the AirGenerate water heater pulls



air from outside, and does not draw air from the interior of the home.

Ecotone Products provides wholesale distribution for AirGenerate water heaters to most locations in the continental United States. Ecotone Products also provides factory-authorized training to interested contractors and electric utilities for AirGenerate water heaters.

Ecotone Products, LLC is a wholly owned subsidiary of General Pacific, Inc. Ecotone Products specializes in the distribution of product solutions in energy efficiency, water conservation, renewable power, and demand response. For more information, visit www.ecotoneproducts.com. **NWPPA**

ABB launches addition to Relion®

On November 21, 2013, ABB, the leading power and automation technology group, announced the release of its Relion® REF615R feeder IED. The REF615R was designed to offer an easy, quick, and affordable way to upgrade ABB's DPU2000R relay along with providing a 19-inch rack mount version of the REF615 feeder IED.

The REF615R is a member of the ABB Relion product family and part of its 615 protection and control series. Engineered from the ground up, the 615 series has been designed to unleash the full potential of the IEC 61850 standard for communication and interoperability of substation automation devices. The new product contains the functionality of traditional REF615, as well as features utilizing some of the latest technologies available today.

"The 3U 19-inch rack mount ensures a seamless, effective way to upgrade the DPU2000R," said 27, marketing director, ABB Distribution Automation. "The same form and fit plus the wire-alike feature provide significant cost savings and greatly reduced installation time. This gives REF615R users a simple, economical solution for upgrading to current technologies."

There are four major ease-of-replacement benefits for ANSI and IEC DPU2000R users: same form and fit eliminates panel cutting or rack repositioning; wire-alike I/O and CT/VT connections greatly reduce drawing modification time; comparable protection and control plus more included; and near SCADA-alike for DNP3.0 points and Modbus registers.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. **NWPPA**

by Eric Christensen

The California ISO–PacifiCorp energy imbalance market experiment

Can public power avoid assimilation?

PacifiCorp and the California Independent System Operator (ISO) are now cooperating to create an energy imbalance market (EIM) encompassing their collective service territories, which stretch from Utah to Southern California. For public power managers who follow “Star Trek,” this development brings visions of the Borg, perhaps the most frightening foe dreamed up by the imaginative writers of “Star Trek: The Next Generation.” The Borg is a half-technological, half-biological alien race with a collective hive-mind. With machine-like implacability, the Borg assimilates all other intelligent species, turning them into cyborgs without independent thought. When the heroic Captain Picard is captured and assimilated, and programmed to instruct the human race “you will be assimilated, resistance is futile,” all hope appears lost. Development of the EIM forces public power to consider whether assimilation into the ISO and its mind-numbingly complex system of regulations and “structured” markets is inevitable, whether resistance is futile, and what can be done to protect core public power values.

The PacifiCorp–ISO proposal

As envisioned in the PacifiCorp-ISO scheme, the EIM would create a short-term market for balancing and regulating reserves, scheduled every 15 minutes and dispatched at five-minute intervals. The core functions of the EIM would be provided by the ISO’s automated 15-minute market. Dispatch would be optimized across the footprint of the balancing area authorities (BAAs) participating in the EIM, principally as a means of optimizing the use of balancing reserves to integrate wind generation and other intermittent resources. The PacifiCorp-ISO EIM is designed to allow other BAAs to easily join, with reduced balancing costs held out as an incentive. It is almost certain that NV Energy, the investor-owned utility (IOU) serving Nevada, will join the EIM once regulators approve its sale to Warren Buffet’s business empire, making it part of the same corporate family as PacifiCorp. It is easy to anticipate that other BAAs in the West might follow suit. The assimilation of BAAs across the West makes the assimilation of public power seem all the more inevitable.

It now appears nearly certain we will see some form of EIM in the West. Public power should take proactive steps to prevent assimilation, to achieve a peaceful co-existence with the EIM, and, ideally, to move the EIM in a direction that benefits public power. To achieve these goals, public power will need to engage actively in the ongoing PacifiCorp-ISO process and the parallel Northwest Power Pool process. Public power should also consider creative structural solutions that

Development of the EIM forces public power to consider whether assimilation into the ISO and its mind-numbingly complex system of regulations and “structured” markets is inevitable, whether resistance is futile, and what can be done to protect core public power values.

can both insulate us from the problems of an EIM and allow us greater control of our own destiny.

Potential problems for public power

Assimilation by the ISO creates a number of problems for public power. These include, for example, “mission creep,” the concern that an EIM would establish a beachhead for a much intrusive entity, such as a west-wide RTO long opposed by public power. Similarly, there is concern that the EIM will lead toward substantially increased regulation by the Federal Energy Commission (FERC), particularly over the Bonneville Power Administration (BPA).

Two examples demonstrate the potential problems. First, Southern California public power entities operating within the California ISO have been subject to FERC regulation of their transmission rates where it was adjudged that their rates were an element of the ISO’s FERC-jurisdictional rates. Second, attempts by both Maryland and New Jersey to deal with the inadequacies of the PJM market, which lacks a coherent mechanism for load-serving entities to secure long-term power supplies, have recently been struck down by federal courts as inconsistent with FERC’s exclusive jurisdiction over the wholesale power market. Thus, experience with other RTO/ISO markets suggests that expansion of the EIM to a west-side RTO could create both greater FERC jurisdiction over western public power entities and undermine the ability of public power to secure long-term power supplies. These outcomes are, of course, antithetical to public power’s core value of local control and its primary mission of assuring reliable and economical power to public power customer-owners.

The problem of expanded FERC jurisdiction is, in light of recent events, a particular concern with respect to BPA. If BPA

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joins the EIM as an active participant, FERC may well assert that the rates it charges for power dispatched into the EIM are a component of FERC-jurisdictional wholesale rates charged by the EIM. This would subject BPA to greater FERC jurisdiction, shifting the focus of control over the agency toward Washington, D.C., and away from the Pacific Northwest. And it may provide a lever for FERC to exert greater pressure on BPA to move toward a west-wide RTO.

As discussed in my May 2013 *Bulletin* article, the risks of mission creep and expanded FERC jurisdiction can be limited by including specific safeguards in the documents governing the EIM. In this article, I propose additional safeguards, including a publics-only EIM and additional measures that should be included in the EIM's governing documents.

Structural solution: a publics-only EIM

By moving aggressively to create its own EIM with membership limited to public power entities, public power can create a structural mechanism to limit both damaging proposals from the EIM and FERC jurisdiction over BPA and other publicly owned utilities. Fundamentally, the proposed structure would bring together public power utilities, including, but not necessarily limited to, publics operating BAAs, to pool regulation and balancing reserves and to interact with the PacifiCorp-ISO EIM.

A publics-only EIM would have several advantages over an EIM with mixed public and IOU participation. Perhaps most importantly, the publics-only structure would create an attractive option for BPA, capturing most or all of the advantages that an EIM might create for BPA, but creating a bulwark against expanded FERC jurisdiction over the agency.

In addition, the publics-only EIM would keep public power's fate squarely in its own hands. Because FERC generally has no authority over public power, a publics-only EIM will be able to resist top-down mandates from FERC. If FERC attempts to force a publics-only structure into an expanded mandatory market along the lines of a west-wide RTO, the publics can resist without the same fear of regulatory consequences that would be inherent in an EIM where FERC-jurisdictional IOUs are participants.

Similarly, when faced with the question of adding new functions that would move the EIM toward a full-scale RTO, a publics-only RTO can consider adding new functions on the basis of their own merits, without concern that mandates from FERC would force their hand. Thus, this structure allows public power greater control of its own fate, limiting the extent to which FERC can use its expansive jurisdiction over IOUs as a lever to force its will on the West.

Additional governance measures

As currently planned, the EIM will operate using the ISO's 15-minute market system. This creates the danger that the ISO will become the default operator of the EIM across the West. With this underlying market structure, ensuring that public power — especially public power entities operating outside California — has an adequate voice in the EIM's operation becomes a challenge.

PacifiCorp and the ISO propose a Transition Committee to move toward an independent governing structure for the EIM, but it is not clear that the proposed structure would result in fully representative governance. The Transition Committee would be composed of seven members; but, apart from EIM participants, there is no requirement that any particular segment of the industry be represented. This is particularly a problem for public power utilities without BAAs, which are likely to ultimately foot the bill for EIM costs but will not directly participate. And the long-term governance structure of the EIM is still to be developed. This process merits public power's careful attention.

In addition, public power should insist on a circuit breaker that would require the EIM to suspend operations if there are indications that the market is being manipulated or is otherwise functioning improperly. Circuit breakers of this type are a common feature of most commodity markets. When there are indications that a market participant is attempting to corner the market in a particular commodity or is otherwise manipulating market prices or outcomes, the circuit breaker kicks in and trading is suspended in that market until appropriate measures are put in place to end the market abuse and make whole those market participants who have suffered from the manipulation.

A circuit breaker is particularly important for the EIM because credible concerns have been raised about market power in the transmission markets covered by the EIM and because the cost-benefit analyses performed so far suggest, at best, modest benefits for the EIM. It is simply not worth the risk of repeating the disaster of the 2000-2001 Enron crisis in order to obtain these relatively modest benefits. A circuit breaker would provide market participants with the kind of immediate protection that was lacking in 2000-2001, when western public power waited for more than a year for FERC to take meaningful action to end widespread manipulation and dysfunction of the power markets, which cost hundreds of thousands their jobs and reduced regional economic output by tens of billions of dollars.

Conclusion

When all hope of avoiding assimilation by the Borg appears lost, Star Fleet throws all its remaining ships into a blockade around the inner Solar System. With some clever last-minute thinking by the crew of the U.S.S. Enterprise, the Borg's invasion is stopped and the human race is saved from assimilation. In the same way, the measures suggested here can create a blockade that protects core public power values, and prevents assimilation into FERC and the ISO. **NWPPA**

Eric Christensen is a partner at Gordon Thomas Honeywell, a full-service law firm with offices in Seattle and Tacoma, Wash., that has successfully represented public power agencies in the Northwest for decades. Christensen counsels NWPPA and other public power agencies on a wide variety of complex regulatory issues. He can be reached at (206) 676-7539 or echristensen@gth-law.com.

BPA preps the power grid for the “big one”

Experts say it’s long overdue and going to be big. This lurking menace is known as a Cascadia subduction zone earthquake — a megaquake with a magnitude of up to 8 or 9 on the Richter scale (with the ground shaking for minutes, not seconds), that’s on par with earthquakes that caused tremendous damage in Chile and Japan in 2010 and 2011.

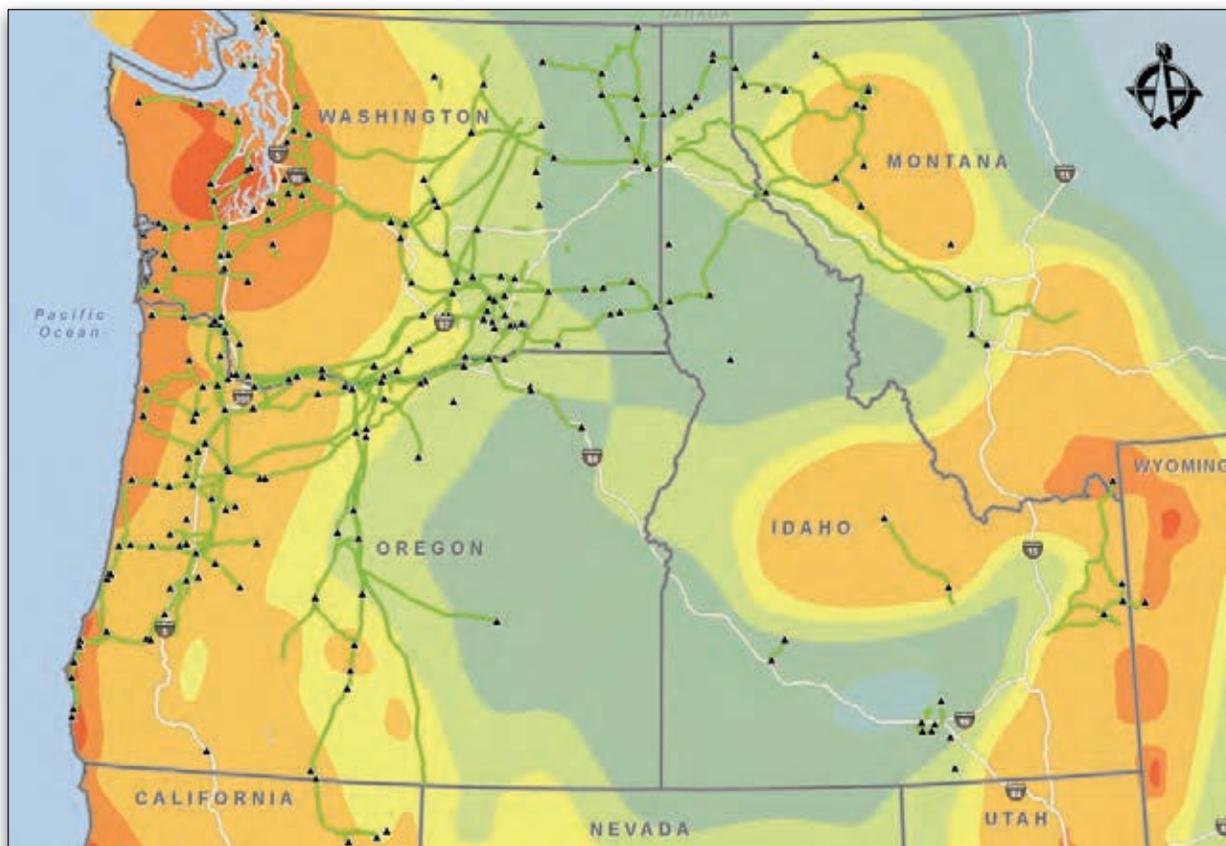
Even though it’s been more than 300 years since the last one hit the Northwest, the Bonneville Power Administration (BPA) is heeding the warnings and leading the industry in assessing and mitigating for the potential damage an extreme event would have on the electric power system.

“We’ve been hardening the Northwest’s power system and investing in seismic-related research for more than 20 years,” said Leon Kempner, principal structural engineer and seismic program manager at BPA, who leads the agency’s seismic-related evaluations, research, standards development, and design mitigations for transmission facilities.

One focus area of BPA’s seismic mitigation program has been assessing which areas and components of the system are most vulnerable to significant damage from an earthquake and other natural disasters such as landslides, extreme wind, and ice storms. “We developed a set of engineering tools for performing vulnerability assessments of power system infrastructure during extreme events,” Kempner explained. “This has allowed us to prioritize how, where, and when we upgrade or reinforce critical facilities and equipment.”

Another component of BPA’s multi-faceted seismic mitigation strategy is ensuring its facilities meet current building code for earthquake hazards. With a number of World War II-era and pre-current code buildings, BPA has had to upgrade a number of its key facilities throughout the region. Much of this work includes retrofitting vulnerable equipment; reinforcing support walls with structural braces and stainless steel

Continued on page 28



The bright-colored areas indicate seismic hazard zones in BPA’s service territory. Photos provided by BPA.



Seismic Program Manager Leon Kempner and Electrical Rigger Foreman II Rick Wiren discuss how to install the base isolators on the 400,000-pound transformer.

studs; and deploying new, Institute of Electrical and Electronics Engineers (IEEE) 693-rated equipment. In recent years, BPA has seismically hardened a control center, eight substation control houses (including hardening nonstructural components such as battery backup systems), a telecommunications building, and other facilities; and updated its seismic design policy for new facilities. BPA has even taken steps to ensure it doesn't lose its inventory of critical system parts in a seismic event. For example, BPA hardened its warehouse that stores its inventory of bushings, which are insulating devices with a center conductor that allow electricity to safely flow into and out of the transformer. In addition, the bushings are stored on special seismically designed racks.

BPA's evaluation of the seismic vulnerability of the transmission system shows that towers are susceptible to large permanent earthquake ground displacements, landslides, and liquefaction (where the soil loses its ability to support structures). Tall river-crossing towers can collapse if their foundations fail. Older substation equipment and rigid bus connections are seismically vulnerable. Power-transformer-mounted surge arresters can fail; bushings can slip or fail; and the radiator can get damaged and leak. So BPA has taken a number of steps to improve resiliency, such as replacing the rigid bus with a flexible bus, bracing, and improving anchoring of circuit breakers.

All of that considered, high-voltage transformers are especially vulnerable in an earthquake, so protecting them is near the top of BPA's seismic mitigation checklist. "They're an

essential component to operating the electric system," said Richard Shaheen, BPA's vice president of Engineering and Technical Services. "Without them, the power flow is compromised."

More than action movies and toys, transformers are devices that convert power from one voltage level to another, typically from high to low. Most of BPA's transformers step down electricity from the high voltages needed to move it across vast distances via large transmission lines from where it's generated — such as Bonneville or Libby Dam — to the population centers and industries where it's needed. From there, local electric utilities step it down again to a lower, safer voltage before it flows into homes and businesses.

For decades, BPA installed transformers on concrete pads or pedestals with rails, but these installations weren't anchored to the foundations.

"Unanchored transformers are extremely vulnerable to earthquake ground motions," Kempner said. "Anchoring them reduces recovery time and protects one of the most important components of the power system."

Earlier this year, BPA completed a decades-long project, which involved anchoring approximately 500 transformer, reactor, and station service units in high-risk seismic hazards areas west of the Cascades, from the southern Oregon border to Canada. This year BPA will begin anchoring at-risk transformers east of the Cascades.

As BPA was wrapping up its anchoring project, it also deployed new, state-of-the-art technology designed to protect high-voltage power transformers during an earthquake.

"We have the first base-isolated transformer in North America, and it's one of a few in the world," Kempner proclaimed while leading a tour in November.

Base isolation is a growing method for protecting structures during an earthquake. In recent years, bridges, buildings, storage tanks, and offshore oil platforms have all been engineered with base-isolation technology. As part of a multiyear research project funded by its Technology Innovation Office, BPA partnered with the Multidisciplinary Center for Earthquake Engineering Research (MCEER) at State University of New York at Buffalo to test the performance of base-isolation technology and then install it on an operational unit.

This industry-leading research didn't come without some unique challenges. The standard for testing the seismic performance of equipment is to model it on a shake table. But there's no practical way to shake test a fitted transformer that weighs 400,000 to 500,000 pounds. Not to mention they're incredibly expensive (one can cost more than a million dollars!) and not readily available if one fails and a replacement is needed, which can take up to two years. So researchers designed a mock transformer that modeled the size and weight of a real one.

"We were really impressed with the performance of the base-isolation devices we tested," said BPA Construction Manager Jonathan Ayers.

In September, BPA moved to the deployment phase of the project, where it outfitted a 460-kilovolt transformer at its

Ross Complex in Vancouver, Wash., with four friction pendulum base isolators. The isolators are a little over nine inches tall and consist of two, 24-by-24-inch steel square plates, with one side of each plate featuring a polished concave surface. The two plates are stacked with an articulated slider between the concave surfaces so that during an earthquake the plates and slider move relative to each other and provide isolation between the ground motion and the transformer.

The installation was no small undertaking. Staff from BPA's substation operations; maintenance and engineering; high-voltage laboratory; testing and energization engineering; and a contract construction crew all chipped in at different phases of the process, which involved jacking up the transformer, installing it on a new concrete pad, and then lowering it down on the four isolators, one in each corner.

"It was a total team effort," said Ayers.

But Kempner's not satisfied with simply being the first in the country to deploy a base-isolated transformer. "Now we're hoping to instrument it so we can see how it performs if and when there's a quake," he said.

Once the device is attached to instruments, BPA can analyze its performance following even modest seismic activity and then model how it's likely to perform in a more potent event. Eventually, BPA could retrofit transformers in high-risk areas with base isolators and make it a standard for transformer units installed at new substations. At less than \$100,000 per transformer, base isolators could be a relatively inexpensive upgrade that could make the Northwest's power system less vulnerable to extreme earthquakes and save the region hundreds of millions of dollars in replacement costs.

In October, Kempner spoke about BPA's base isolation project and its other seismic mitigation investments at the Northwest Electric Utility Seismic Group meeting, where representatives from 10 utilities across the region discussed seismic hazards and vulnerabilities, mitigation efforts, and post-disaster response scenarios.

"We all want the power on after the next big earthquake," said Robert Cochran, senior civil engineer at Seattle City Light, who organized and hosted the meeting. "And, if it is, it will most likely be the result of purposeful planning by each utility in the region."

Future meetings between Northwest utilities are planned to help improve the regional response of the power system to earthquake hazards.



BPA's river-crossing towers in Longview, Wash. The voltages are 115kv, 230kv, and 500kv, and the tallest one is approximately 460 feet.

BPA's other current seismic research includes investigating the seismic failure mode of draw-type transformer bushings and developing a retrofit option, as well as studying the seismic performance and mitigation options of interconnected equipment at 115-kilovolt, 230-kilovolt, and 500-kilovolt substations. The agency is also participating in the development of industry standards for seismic design of transmission line systems and sponsoring research in earthquake engineering for transmission line systems. Protecting the massive towers that span transmission lines across waterways is another one of BPA's focus areas. Detailed site investigations suggest BPA's four major river-crossings on the Willamette and Columbia rivers are vulnerable to seismic-induced liquefaction, so BPA is developing mitigation options for existing and future river-crossing towers.

Electricity will be critical to the region's recovery if and when a Cascadia subduction zone quake hits. Whether hardening facilities, protecting power system equipment, or researching the latest seismic mitigation tools and technologies, BPA takes its responsibility of shoring up its assets extremely seriously.

"These investments will help us get the lights back on sooner," Kempner added. "Not only that, they'll limit the potential damage to the system, which could save the region hundreds of millions of dollars in avoided replacement costs."

NWPPA

Joel Scruggs is a public affairs specialist in the Media Relations Department at Bonneville Power Administration. He can be reached at either (503) 230-5511 or jlsruggs@bpa.gov.

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POSITION: System Engineer

COMPANY: Okanogan County PUD (Okanogan, Wash.)
SALARY: DOE.

DEADLINE TO APPLY: January 17, 2014.

TO APPLY: Send resumé and salary requirements to Human Resources, Okanogan County PUD, P.O. Box 912, Okanogan, WA 98840-0912, fax (509) 422-8371, or email laurar@okpud.org.

POSITION: Senior Engineer

COMPANY: Golden Valley Electric Association (Fairbanks, Alaska)
SALARY: DOE.

DEADLINE TO APPLY: January 17, 2014.

TO APPLY: Download application at www.gvea.com. Application may be submitted to info@gvea.com, by mailing to P.O. Box 71249, Fairbanks, AK 99707, or fax to (907) 458-6367.

POSITION: Superintendent

COMPANY: PUD No. 1 of Lewis County (Chehalis, Wash.)
SALARY: Commensurate with experience.

DEADLINE TO APPLY: January 17, 2014.

TO APPLY: Application and complete job description are available at www.lcpud.org or by calling (360) 740-2412.

POSITION: Electrical Engineer

COMPANY: Modesto Irrigation District (Modesto, Calif.)

SALARY: \$81,473-\$127,067 annually.

DEADLINE TO APPLY: January 18, 2014.

TO APPLY: Application and job details can be found at www.mid.org or by calling the MID Human Resource Department at (209) 526-7341.

POSITION: Customer Engineering Supervisor

COMPANY: Anchorage Municipal Light & Power (Anchorage, Alaska)

SALARY: \$72,800-\$92,768 annually.

DEADLINE TO APPLY: January 18, 2014.

TO APPLY: Apply online at www.muni.org/job.

POSITION: Line Design Engineering Supervisor

COMPANY: Anchorage Municipal Light & Power (Anchorage, Alaska)

SALARY: \$73,800-\$92,768 annually.

DEADLINE TO APPLY: January 18, 2014.

TO APPLY: Apply online at www.muni.org/job.

POSITION: Energy Specialist Assistant

COMPANY: Northern Wasco County PUD (The Dalles, Ore.)

SALARY: \$17-\$21 per hour, DOE.

DEADLINE TO APPLY: January 20, 2014.

TO APPLY: Send resumé, application, and cover letter to HR Answers, Inc., 7659 S.W. Mohawk St., Tualatin, OR 97062, email to hre@hranswers.com (please put "Energy Specialist" in subject line), or fax to (503) 885-8614.

POSITION: Power Dispatcher

COMPANY: Anchorage Municipal Light & Power (Anchorage, Alaska)

SALARY: \$110,219.20 annually.

DEADLINE TO APPLY: January 21, 2014.

TO APPLY: Apply online at www.muni.org/job.

POSITION: Turbine Maintenance Superintendent

COMPANY: Anchorage Municipal Light & Power (Anchorage, Alaska)

SALARY: \$72,800-\$92,768 annually.

DEADLINE TO APPLY: January 21, 2014.

TO APPLY: Apply online at www.muni.org/job.

POSITION: Generation Division Manager

COMPANY: Anchorage Municipal Light & Power (Anchorage, Alaska)

SALARY: \$72,800-\$92,768 annually.

DEADLINE TO APPLY: January 21, 2014.

TO APPLY: Apply online at www.muni.org/job.

POSITION: Chief Power Dispatcher

COMPANY: Anchorage Municipal Light & Power (Anchorage, Alaska)

SALARY: \$72,800-\$92,768 annually.

DEADLINE TO APPLY: January 21, 2014.

TO APPLY: Apply online at www.muni.org/job.

POSITION: Information Technology (IT) Support Technician

COMPANY: Glacier Electric Cooperative (Cut Bank, Mont.)

SALARY: \$26.50-\$30.25 per hour, based on experience.

DEADLINE TO APPLY: January 31, 2014.

TO APPLY: Applications and more information on this position can be found at www.glacierelectric.com. Send completed application, resumé with salary history, and three professional references to Glacier Electric Cooperative, 410 East Main St., Cut Bank, MT 59427.

POSITION: Journeyman Lineman — Night Shift

COMPANY: Peninsula Light Company (Gig Harbor, Wash.)

SALARY: \$41.12 per hour.

DEADLINE TO APPLY: February 1, 2014.

TO APPLY: Only apply online at www.penlight.org/index/jobs.aspx.

POSITION: Warehouseman

COMPANY: Peninsula Light Company (Gig Harbor, Wash.)

SALARY: \$19.32-\$27.65 per hour.

DEADLINE TO APPLY: February 11, 2014.

TO APPLY: Only apply online at www.penlight.org/index/jobs.aspx.

POSITION: Meter Relay/Substation Technician — Regular

COMPANY: Matanuska Electric Association (Palmer, Alaska)

SALARY: Union scale.

DEADLINE TO APPLY: March 9, 2014.

TO APPLY: Complete and submit an MEA employment application, found at www.mea.coop.

POSITION: Distribution Engineer II — Regular

COMPANY: Matanuska Electric Association (Palmer, Alaska)

SALARY: DOE.

DEADLINE TO APPLY: March 9, 2014.

TO APPLY: Complete and submit an MEA employment application, found at www.mea.coop.

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POSITION: Field Analyst

COMPANY: Homer Electric Association (Homer, Alaska)

SALARY: DOE.

DEADLINE TO APPLY: Open until filled.

TO APPLY: Apply online at <http://homerelectric.applicantpro.com/jobs>.

POSITION: Senior Programmer Analyst

COMPANY: Matanuska Electric Association (Palmer, Alaska)

SALARY: \$58,828 annually, DOE.

DEADLINE TO APPLY: Open until filled.

TO APPLY: Apply online at www.mea.coop.

POSITION: Line Division Manager

COMPANY: Turlock Irrigation District (Turlock, Calif.)

SALARY: \$8,122-\$10,366 monthly.

DEADLINE TO APPLY: Open until filled.

TO APPLY: Submit application to Human Resource Department via www.tid.org.

POSITION: Journeyman Lineman

COMPANY: Public Utility District No. 2 of Pacific County (Raymond, Wash.)

SALARY: \$39.80 per hour, plus benefits.

DEADLINE TO APPLY: Open until filled.

TO APPLY: Application and description available at www.pacificpud.org, or at the Raymond office at 405 Duryea St. and the Long Beach office at 9610 Sandridge Rd.

POSITION: Substation Engineer I, II, or III

COMPANY: Grays Harbor PUD (Aberdeen, Wash.)

SALARY: DOE.

DEADLINE TO APPLY: Open until filled with a first review date of January 29, 2014.

TO APPLY: Application and job description can be found at www.ghpud.org. Application, resumé, and cover letter are required.

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