# NWPP Resource Adequacy Symposium

#### WE'VE COME SO FAR

Since 2019, members of the Northwest Power Pool's Resource Adequacy Program have made incredible progress in developing collaborative solutions to address the region's resource adequacy needs. Today we invite you to hear about the current state of adequacy in the region, the progress we have made so far to develop a resource adequacy program, and to hear from executives on the role the resource adequacy program has to play in the region.

THANK YOU FOR JOINING US,

Frank Afranji Northwest Power Pool President

August 3, 2021 9am-1:30pm PDT







# Second Resource Adequacy Symposium Agenda

9:00 – 9:10 Welcome Video

**Bill Drummond, Northwest Power Pool Chair** 

Maria Pope, Portland General Electric

John Hairston, Bonneville Power Administration

Lisa Grow, Idaho Power

**Debra Smith, Seattle City Light** 

9:10 - 9:20 Welcome

Frank Afranji, Northwest Power Pool President

9:20 – 9:40 Keynote

Federal Energy Regulatory Commission Chair Richard Glick

9:40 – 10:50 Report from the Region

Moderator: Therese Hampton, Public Generating Pool

Panelists: Ben Kujala, Northwest Power and Conservation Council

Arne Olson, Energy and Environmental Economics, Inc.

Randy Hardy, Hardy Energy Consulting

Maury Galbraith, Western Interstate Energy Board

**Branden Sudduth, Western Electricity Coordinating Council** 

10:50 - 11:00 Break

11:00 – 12:00 End of Phase 2B

Moderator: Rebecca Sexton, Sapere Consulting

**Panelists: Gregg Carrington, Northwest Power Pool** 

Mark Holman, Powerex

Robert Davis, Chelan Public Utility District Sarah Edmonds, Portland General Electric

#### 12 :00 – 1 :20 **Executive Roundtable**

Moderator: Commissioner Ann Rendahl Washington Utilities and

**Transportation Commission** 

Panelists: Stefan Bird, Pacific Power

**Steve Wright, Chelan Public Utility District** 

**Jason Thackston, Avista** 

Frank Lawson, Eugene Water and Electric Board

**Robert Rowe, Northwestern Energy** 

## 1:20-1:30 Closing Remarks

Frank Afranji, Northwest Power Pool President



# Second Resource Adequacy Symposium Speakers, Panelists, and Moderators

#### FRANK AFRANJI

President, Northwest Power Pool

Frank Afranji is President of the Northwest Power Pool where he is responsible for the management and coordination of various programs and services provided by the Power Pool. These include facilitation and coordination of reserve and frequency response sharing, response strategy, transmission planning, system coordination management, operational training services and additional serves to members and third parties through separate, customized contracts.



Prior to joining NWPP Afranji served as Director of Transmission and Reliability Services for Portland General Electric where he was responsible for various aspects of the gas and electric transmission system including

capacity sales, contract administration, transmission scheduling, high voltage regional transmission planning, industry restructuring and Balancing Area activities. Afranji served on and chaired a variety of WECC and NERC committees.

Afranji earned Bachelor and Master degrees in engineering at Southern Illinois University at Carbondale, Illinois and Master of Business Administration from Portland State University. Afranji has considerable community involvement and has received recognition from many organizations including the Harold Schnitzler "Spirit of Unity" in 2009; The 1995 World Affairs Council of Oregon R. Willard deWeese Award for International Community Service; 1994 Ecumenical Ministries Louis Hunderup Award; 1993 Stephen Wise Humanitarian Award; 1990 Oregon Peace Institute Award.

## STEFAN BIRD President and CEO, PacifiCorp



Stefan Bird is president and CEO of Pacific Power, a division of PacifiCorp serving 783,000 customers across Oregon, Washington and California. In his role, Bird oversees PacifiCorp's 16,500-mile transmission system spanning 10 states, renewable resource operations, commercial and risk management activities, and Portland, Oregon-based corporate teams serving 2 million customers in Pacific Power and Rocky Mountain Power service areas. PacifiCorp is the largest regulated utility owner of wind resources and operates the largest privately held grid in the West.

Under his leadership, the company is making historic investments in renewable energy and transmission infrastructure needed to transform the West

to a sustainable energy future. Bird has also led the company's collaborative regional efforts to develop a transformative energy market that maximizes renewable energy and improves grid reliability while lowering customer costs.

Bird serves on several nonprofit boards and public service organizations including as chairman, PacifiCorp Foundation.

#### **GREGG CARRINGTON**

Chief Operating Officer, Northwest Power Pool



Gregg brings over 37 years experience in the electric utility industry. Gregg is currently the Chief Operating Officer for the Northwest Power Pool. The Northwest Power Pool Corporation, the non-profit that helps coordinate electric grid operations for the Northwestern United States and Western Canada. As COO, Gregg supports regional program development activities, including the Northwest Power Pool's development of a regional Resource Adequacy program, as well as day-to-day functions of the NWPP, including system operations and the NWPP's implementation of contingency reserve and western frequency reserve sharing programs.

Formerly, Gregg was the Managing Director of Energy Resources at Chelan Public Utility District. Highlights from his career include directing energy planning and trading, energy conservation, regulatory and government affairs, environmental resources, engineering, and licensing and compliance. Gregg holds a bachelor and masters degree in Engineering from Clarkson University.

### **ROBB DAVIS**

Attorney, Chelan Public Utility District

Robb is an attorney at Chelan PUD, advising the utility on its energy and transmission related activities. From fall 2020 through spring 2021, Robb was also the interim Managing Director of Energy Resources, responsible for Chelan PUD's wholesale marketing and trading, energy planning, and conservation and energy efficiency. Robb joined Chelan PUD as an energy policy advisor in 2015.



Before Chelan PUD, Robb was an attorney at the Bonneville Power Administration, focused on ancillary services and efforts to develop and implement real-time organized markets. Robb received bachelor's degrees in engineering from Purdue University, and following a brief stint as a naval officer, received his J.D. from Northwestern University.

# BILL DRUMMOND Board Chairman, Northwest Power Pool



Bill Drummond has been active in the electricity industry for 40 years. He is currently the Board Chairman of the Northwest Power Pool's Board of Directors since 2018. From 2014-2020 Drummond served as the Executive Director of the Mid-West Electric Consumers Association. He was the Administrator and CEO of Bonneville Power Administration (BPA) from 2013-2014. Drummond has also served as BPA's deputy administrator from 2011-2013.

Before joining BPA, Drummond was manager of the Western Montana Electric Generating and Transmission Cooperative in Missoula, Montana, for

17 years. From 1988 to 1994, he led the Public Power Council, an association of all Northwest publicly owned utilities.

During more than 30 years in the energy industry, Drummond has been a leader on many regional task forces and committees, including the Bonneville Environmental Foundation, Northwest Energy Efficiency Alliance, Northwest Wind Integration Forum and Northwest Energy Efficiency Task Force. Nationally, he has served on committees of the American Public Power Association and the National Rural Electric Cooperative Association. Drummond has degrees in forestry from the University of Montana and economics from the University of Arizona. In addition to his roles in the Northwest power industry, he is an active volunteer for Planned Parenthood.

Drummond and his wife, Elizabeth, have two grown sons and live in Missoula, Montana.

SARAH EDMONDS

Director of Transmission and Market Services, Portland General Electric



Ms. Edmonds is responsible for regulatory and policy matters affecting PGE's transmission and market services business. She oversees the development of strategy and policy recommendations relating to market expansion and development, emerging regional and national marketplace initiatives, and transmission rates.

MAURY GALBRAITH
Executive Director, Western Interstate Energy Board

Maury Galbraith is the Executive Director of the Western Interstate Energy Board (WIEB). He manages the efforts of WIEB to facilitate cooperation among western U.S. states and Canadian provinces to improve the efficiency of the western electric power system. He also manages the work of the Western Interconnection Regional Advisory Body (WIRAB) – which provides advice to the Federal Energy Regulatory Commission (FERC) to improve the reliability of the western grid.



Prior to joining WIEB, Mr. Galbraith was the Administrator of the Energy Division at the Oregon Public Utility Commission and a Senior Policy Advisor at the U.S. Forest Service, Pacific Northwest Research Station. Previously he worked as a Resource Analyst with the Northwest Power and Conservation Council. Maury holds a M.A. in economics from Washington State University and a B.S. in economics from the University of Oregon.

#### RICHARD GLICK

Chair, Federal Energy Regulatory Commission



Chair Richard Glick was named by President Biden to be Chairman of the Federal Regulatory Commission on January 21, 2021 and is serving a Commission term that ends June 30, 2022.

Glick was nominated to the Federal Energy Regulatory Commission by President Donald J. Trump in August 2017 and confirmed by the U.S. Senate on November 2, 2017.

Before joining the Commission, he was general counsel for the Democrats on the Senate Energy and Natural Resources Committee, serving as a senior policy advisor on numerous issues including electricity and renewable energy.

Prior to that, he was vice president of government affairs for Iberdrola's renewable energy, electric and gas utility, and natural gas storage businesses in the United States. He ran the company's Washington, DC, office and was responsible for developing and implementing the U.S. businesses' federal legislative and regulatory policy advocacy strategies.

Chair Glick previously served as a director of government affairs for PPM Energy and before that was director of government affairs for PacifiCorp. He served as a senior policy advisor to U.S. Energy Secretary Bill Richardson, and before that was legislative director and chief counsel to U.S. Senator Dale Bumpers of Arkansas. From 1988-1992 Chair Glick was an associate with the law firm of Verner, Liipfert, Bernhard, McPherson and Hand.

He is a graduate of George Washington University and Georgetown Law. He and his wife Erin have a son.

#### LISA A. GROW

President and Chief Executive Officer, Idaho Power

Lisa Grow has been President and Chief Executive Officer (CEO) of IDACORP, Inc. and Idaho Power since June 1, 2020. She most recently served as President of Idaho Power and was appointed to the IDACORP and Idaho Power boards of directors in February 2020.

Prior to her position as President and CEO, Grow served as Idaho Power's Senior Vice President and Chief Operating Officer from March 2017 to October 2019. Grow has also served as Senior Vice President of Operations and, prior to that, Senior Vice President of Power Supply.



Grow began her career at Idaho Power in 1987 and held many engineering positions before moving into management. She took on diverse jobs that allowed her to gain valuable experience in many areas of the company. In 2005, Grow was named Vice President of Delivery Engineering and Operations.

Grow graduated from the University of Idaho in 1987 with a Bachelor of Science degree in electrical engineering and received a Master of Business Administration degree from Boise State University in 2008.

Grow is a leader in her field and involved in a number of industry groups, currently or previously serving on various committees and boards associated with the Western Electricity Coordinating Council, Northwest Power Pool, National Hydropower Association, Pacific Northwest Utilities Conference Committee and the Department of Energy Electricity Advisory Committee.

Grow was on the advisory committee of, and presented at, the University of Idaho's Energy Executive Course (formerly UEC), an internationally-recognized training program for industry executives worldwide. She also serves on the university's Foundation Board and is a past member of the advisory boards for the University of Idaho College of Engineering and the Boise State College of Engineering.

She served on the board of the Idaho division of the American Heart Association and currently serves on the St. Luke's Health System Board of Directors. Grow is also a Hope Society Member of the Women's and Children's Alliance. In 2021, she was appointed to the Federal Reserve Bank of San Francisco's Salt Lake City Branch Board of Directors for a three-year term.

JOHN HAIRSTON
Administrator and CEO, Bonneville Power Administration



John Hairston was named administrator and CEO in January 2021. In this role, he is responsible for managing the nonprofit federal agency that markets carbon-free power from Columbia River hydroelectric dams and the region's one nuclear plant. BPA also operates most of the high-voltage power grid across the Pacific Northwest, distributing renewable energy to the region and beyond.

Hairston, who joined BPA in 1991, served as acting administrator since September 2020. Previously, he served as chief operating officer since October 2019, where he oversaw Power Services; Transmission Services; Environment, Fish and Wildlife; Customer Support Services; and the Business Transformation Office.

Hairston also served as BPA's chief administrative officer, beginning in June 2015. In this role he provided policy and strategic guidance concerning BPA's internal operations and oversaw Safety; Human Capital Management; Security and Continuity of Operations; Supply Chain; Workplace Services and Information Technology.

In 2006, Hairston was named BPA's chief compliance officer, leading the development and implementation of the Agency Compliance and Governance Organization, providing overall coordination and management of systems and processes established to assure agency compliance with regulatory rules and standards.

Hairston began his career at BPA as an economist in the Rates Forecasting and Rate Design organizations and then performed various positions in Energy Efficiency, including the program manager for Peak Load Management. In 2002, Hairston was assigned to implement and manage the BPA Power Services product, Slice. The Slice product accounts for a sizeable portion of BPA's annual sales with a portfolio of its largest public customers.

Hairston holds a bachelor's degree in economics from The Southern University, a master's degree in Urban Studies from Portland State University and a Juris Doctorate from the Lewis & Clark Northwestern School of Law. He also holds the certification of Compliance and Ethics Professional from the Society of Corporate Compliance and Ethics.

#### THERESE HAMPTON

Executive Director, Public Generating Pool

As Executive Director of the Public Generating Pool (PGP), Therese Hampton represents eleven consumer-owned utilities in Oregon and Washington. PGP Member utilities serve approximately one million customers and manage 8,000 MW of generating resources. Eight PGP members also purchase 45 percent of the requirements power sold by the Bonneville Power Administration.

Prior to joining the PGP, Therese spent 13 years at the Bonneville Power Administration in roles as Vice President of Environment, Fish and Wildlife, Manager of Power and Operations Planning, and Manager of Transmission and

Reserve Services. She also held the position of Managing Director of Hydro Regulatory Compliance with PacifiCorp and has provided consulting services to a broad range of industry clients. She holds Bachelor of Science and a Master of Science degrees in Economics from Portland State University.



#### **RANDY HARDY**

Principal, Hardy Energy Consulting

Randy Hardy provides strategic advice to utilities, wind/renewable generators, and other organizations in the current rapidly changing electricity environment. His experience has covered regulatory, legislative and transactional work, including thirteen years as CEO managing two large electric utilities – Seattle City Light and Bonneville Power Administration (BPA).



He has dealt with the full range of challenges companies face in today's electricity markets, from dramatically downsizing formerly large workforces to developing flexible, innovative marketing strategies to resolving complex wind integration problems.

As CEO of BPA from 1991 to 1997, Mr. Hardy managed a \$2.4 billion public corporation which supplies 40 percent of all electricity and over 75 percent of the high voltage transmission in the Northwest. Mr. Hardy made significant cost and marketing changes to stabilize that agency's financial position during fierce wholesale competition. He also managed BPA's recovery from the August 1996 West Coast power outage. At Seattle, from 1984 to 1991, Mr. Hardy instituted a comprehensive productivity improvement program, negotiated natural resource issues for the successful relicensing of three major dams on the Skagit River, and arranged for an ownership interest in the third AC transmission line between the Northwest and California.

More recently, Mr. Hardy has assisted several Northwest wind generators with their transmission and marketing arrangements in the Northwest, as well as in resolving their integration challenges with BPA and other transmission providers.

From 1982 to 1984, Mr. Hardy served as the Executive Director of the Pacific Northwest Utilities Conference Committee (PNUCC), a long-range planning group for Northwest electric utilities and major industries. He held various positions within the Department of Energy, the Federal Energy Administration (FEA), and BPA from 1975-1982. In 1975-76, he was selected as a White House Fellow and served as a Special Assistant to the FEA Administrator.

Mr. Hardy is a 1966 graduate of the U.S. Naval Academy in Annapolis, Maryland. From 1966 to 1976, he was a naval officer, performing various shipboard and staff assignments worldwide. He received his

Masters in Public Administration (MPA) from the University of Washington in 1972. Mr. Hardy is a former Chairman of the Electric Power Research Institute (EPRI), past President of the American Public Power Association (APPA), and previous Board Member of the Large Public Power Council (LPPC) and Washington Public Power Supply System (WPPPSS).

Mr. Hardy and his wife, Jane Van Leuven, live with their son, Christopher, in Seattle, Washington.

## MARK HOLMAN

Managing Director of Power, Powerex



Mark is responsible for Powerex's wholesale electricity trading and marketing activities. Mark joined Powerex, and the energy trading industry, in 2001 working in a variety of trading and management roles.

Prior to joining Powerex, Mark worked in portfolio management in the mid-1990s and led an internet technology company from 1999 to 2001. Mark has a Bachelor of Commerce Degree in Finance from the University of British Columbia and is a CFA® charterholder.

#### **BEN KUJALA**

Power Division Director, Northwest Power and Conservation Council

Ben joined the Council staff in 2013 as a Senior Analyst, then became Power Division Director in October 2016. He recently led the redevelopment of the Regional Portfolio Model for the Seventh Power Plan and coordinated the efforts to link together multiple power system models for a cohesive analytical framework for the plan.

He is an expert in power system analysis and has represented the Council with regional transmission planners and the Western Electricity Coordinating Council. He is a member of the IEEE Power and Energy

Society and has been heavily involved with the working group on Loss of Load Expectation.



Prior to joining the Council, Ben was an Operations Research Analyst for the Bonneville Power Administration where he worked on the long-term adequacy implications of wind generation, electricity market price forecasting, FCRPS operations and evaluating the benefits of a Northwest Power Pool Energy Imbalance Market. He received a bachelor's degree in Mathematics and a master's degree in Statistics from Portland State University.

## FRANK LAWSON

General Manager, Eugene Water & Electric Board



Frank Lawson became Eugene Water and Electric Board's general manager in June 2016. As general manager, Frank directs an approximately 500-employee utility that serves about 200,000 people with electricity and water in the Eugene metropolitan area and the lower McKenzie River Valley.

Frank has over 30 years of technical and management experience in various areas including engineering, marketing, operations, customer service, sales, and finance.

During his career, he has led the development and launch of technology, products, systems, and services used in power generation and delivery,

drinking water treatment, pharmaceutical and semiconductor manufacturing, and a variety of other industries. He has worked for small entrepreneurial organizations, as well as large companies including Danaher, Pacific Scientific, and JELD-WEN. More recently, as EWEB's Electric Systems Engineering Supervisor, Frank was responsible for many aspects of electric transmission & distribution infrastructure planning, system reliability and regulatory compliance, capital financial planning, and capital project execution for the utility.

Frank is a registered Professional Engineer in the State of Oregon. He earned a Bachelor of Science Degree in Electrical and Computer Engineering from Oregon State University, and a Master of Business Administration from Northwest Christian University.

#### ARNE OLSON

Senior Partner, E3 Energy+Environmental Economics

Mr. Olson joined E3 in 2002 and became a partner in 2010. Mr. Olson helps clients navigate changes to bulk electric system operations and investment needs brought about by policies promoting clean and renewable energy production.

He led the technical analysis and drafting of the landmark 2014 report *Investigating a Higher Renewable Portfolio Standard for California*, prepared for the five largest utilities in California, which delineated the challenges of achieving higher renewable penetrations as well as the many solutions that are available to ease the integration burden.



Since that time, he has overseen E3's fast-growing resource planning practice which has completed numerous studies of deeply-decarbonized and highly-renewable power systems in California, Hawaii, the Pacific Northwest, the Desert Southwest, New York, South Africa, and many other regions.

Olson has also led the development of E3's industry-leading resource planning software including the RESOLVE model that develops optimal portfolios of renewable, conventional and energy storage resources to meet electric energy, capacity, and reliability needs while meeting specified policy goals including GHG caps and minimum renewable penetration levels and the RECAP model that calculates Loss-of-Load Probability and related statistics to ensure that power systems can meet load reliably under high renewable penetrations.

## MARIA POPE President and CEO, Portland General Electric



Maria Pope is president and CEO of Portland General Electric, Oregon's largest electric company. Pope works with customers, community members and government officials to lead Oregon's clean energy future.

Pope joined PGE in 2009 as CFO and treasurer. She also oversaw the company's power generation facilities, wholesale power marketing and long-term resource strategy as senior vice president of Power Supply, Operations and Resource Strategy. From 2006 to 2008, she was a member of PGE's board of directors.

Prior to PGE, Pope was CFO of Mentor Graphics Corporation and held senior operating and finance positions within the forest products and consumer products industries. She began her career in banking with Morgan Stanley & Co. Pope serves on the Oregon Global Warming Commission as well as other boards and commissions, including the Oregon Business Council and the Electric Power Research Institute.

Pope is an alumna of the Stanford Graduate School of Business and earned her bachelor's degree from Georgetown University.

#### ANN RENDAHL

Commissioner, Washington State Utilities and Transportation Commission

Ann Rendahl was appointed to serve as a commissioner of the Washington Utilities and Transportation Commission by Gov. Inslee in December 2014 for a term ending Jan 1, 2021 and has been reappointed by Governor Inslee in December 2021 for a second term ending Jan. 1, 2027.

Ann currently serves as chair of the Electricity Committee and a member of the Critical Infrastructure Committee for the National Association of Regulatory Commissioners (NARUC), and serves on the NARUC Board of Directors.



Ann serves as a member of the Body of State Regulators for the California ISO's Energy Imbalance Market. Ann has been appointed to serve as a member of the Electric Power Research Institute's Advisory Council through August 2022 and has been appointed to serve on the Advisory Council of the Center for Public Utilities at New Mexico State University.

Ann previously served as the Director of Policy and Legislation for the UTC. Prior to leading the UTC's Policy and Legislative Affairs Section, she served as the Director of the Administrative Law Division, as an administrative law judge for the UTC, and as an assistant attorney general representing the Utilities and Transportation Division.

Ann is a graduate of Wellesley College and received a master's degree in Public Policy from the Graduate School of Public Policy at the University of California, Berkeley. She received her law degree from Hastings College of the Law, University of California, San Francisco.

BOB ROWE
President and CEO, Northwestern Energy



Bob Rowe has been NorthWestern Energy's President and CEO since August 2008. Co-Chair of the Institute for Electric Innovation, an Institute of the Edison Foundation focused on advancing the adoption of innovative and efficient technologies among electric utilities and their technology partners that will transform the power grid; a member of the EEI Board of Directors Executive Committee; a member of the American Gas Association Board of

Directors; Western Energy Institute past chair and current executive committee member. Bob has over 20 years of energy and utility industry experience.

# REBECCA SEXTON Senior Consultant, Sapere Consulting, Inc.

Rebecca is a Senior Consultant with Sapere Consulting, Inc. Since joining Sapere in 2014, she has assisted clients with regional project and program facilitation, project management, risk management, decision analysis, and strategic planning. Rebecca brings a direct communication style to her projects, with a focus on successful project outcomes and pragmatic collaboration between project participants, stakeholders, and decision-makers.



Since 2019, Rebecca has served as project manager and facilitator for the NWPP RA program design. She and the Sapere team manage the Steering Committee, support and organize the Committee's many working groups, manage and track participant issues, and coordinate technical information needs for the many workstreams.

Before working with Sapere, Rebecca earned a master's degree in civil engineering from Oregon State University and a bachelors in Geology-Physics from Whitman College; she previously worked with a small coastal research team at the Washington State Department of Ecology. Rebecca is a certified project management professional (PMP). Rebecca lives in Lakewood, Washington, where she and Luna the labradoodle love to entertain, cook, and garden.

#### **DEBRA SMITH**

General Manager and CEO, Seattle City Light



Debra Smith is the General Manager and CEO of Seattle City Light, one of the nation's largest community-owned electric utilities. City Light serves more than 480,000 meters and 955,000 people across Seattle and parts of eight adjacent franchise cities, and unincorporated King County.

Debra believes strongly in the value of teamwork, partnerships, and collaboration. As a public employee, she prioritizes customer needs while acknowledging that great customer service starts with engaged and committed employees. Under her leadership, City Light is focused electrification, equity and creating customer value.

Previously, Debra served as Central Lincoln PUD's General Manager from July 2013 to October 2018. She brought 17 years of experience to that role from the Eugene Water and Electric Board, where she held a variety of positions, including Assistant General Manager.

Debra earned a Bachelor of Science in Finance from Arizona State University and is a Senior Fellow with the American Leadership Forum of Oregon. She served as the first Chairwoman of the Public Power Council and is currently the Vice Chair of Long-Range Planning. Debra also serves on the board of the Pacific Northwest Utilities Conference Committee.

Debra and her husband Dale have raised three sons and two daughters. They love city life and look forward to being part of downtown Seattle's post-pandemic recovery. They also have a home in Eugene, Oregon and enjoy travel, time with friends and family and hanging out with their five-year old grandson Oliver.

#### **BRANDEN SUDDUTH**

Vice President of Reliability Planning and Performance Analysis, Western Electricity Coordinating Council

Branden Sudduth, Vice President of Reliability Planning and Performance Analysis, is responsible for WECC's technical and analysis functions, including Reliability Planning and Assessments, Standards Development,

Performance Analysis, Event Analysis, and Situation Awareness.

In his previous role as Director of Reliability Risk Management, Branden provided leadership and strategic direction for the Performance Analysis and Event Analysis/Situation Awareness departments and was responsible for supporting several industry stakeholder efforts through WECC's Operating and Market Interface Committees.



Branden holds a Bachelor of Science degree in electrical engineering from Brigham Young University, a Master of Engineering degree in electrical engineering from the University of Idaho, and an MBA from Weber State University.

#### JASON THACKSTON

Senior Vice President Resources and Environmental Compliance Officer, Avista



Jason Thackston is Senior Vice President of Energy Resources and Environmental Compliance Officer for Avista. He is responsible for overseeing the utility's environmental affairs, gas supply, and electric supply and generation operations. He joined the company in 1996 and has held leadership positions in customer solutions.

energy delivery, finance, risk management, investor relations, and corporate development.

Jason serves on the board of trustees of Whitworth University as well as on the boards of Association of Washington Business, Independent Colleges of

Washington, Pacific Northwest Utilities Conference Committee, Spokane County United Way, and Health Sciences and Services Authority of Spokane County.

# STEVE WRIGHT General Manager, Chelan Public Utility District No. 1.

Steve Wright, General Manager, was appointed to his current position in September 2013. Steve held a number of positions within Bonneville Power Administration, the last 12 years as Administrator/CEO.

Steve has served on the Boards of the American Public Power Association and the Alliance to Save Energy, on the Steering Committee for the Large Public Power Council and Past Chair of the Public Generating Pool. Steve graduated from the University of Oregon with a Master's degree in public administration.

