



Board of Directors May 3, 2019 Meeting Minutes

The PNUCC Board of Directors met on May 3, 2019 at the Portland Airport Sheraton. The list of attendees is attached. *The next PNUCC Board meeting will be on **June 7, 2019** at the **Portland Airport Sheraton Hotel**.*

Corporate Business

Vice-Chair **Tom DeBoer**, Snohomish PUD, opened by welcoming everyone and asking them to review and acknowledge the PNUCC Antitrust Compliance Statement. Following introductions, DeBoer entertained a motion to approve the April 5, 2019 meeting minutes. The minutes were unanimously approved.

PNUCC Member News

- **Scott Kinney**, Avista, said they will join the EIM in April of 2022. And **Jason Thackston** added that Avista has announced a goal to serve its customers with 100% clean electricity by 2045 and to have a carbon neutral supply of electricity by the end of 2027.
- The sun was shining when their solar project went live, said **Tom DeBoer**, Snohomish PUD, and their community solar project sold out in the first week.
- **Dave Ward**, Grays Harbor, provided an update on their encounter with customers and social media.
- Northwest Power Pool's **Frank Afranji** shared there was overwhelming consensus around a joint effort to study resource adequacy in the region and a contract with E3 to begin Phase 1 was moving forward. The effort will begin with the Power Pool footprint and consideration will be given to an interconnection-wide study in the next phase.

Tacoma's **Chris Robinson** extended his thanks and leadership to Frank Afranji for spearheading such an important effort.

Franco Albi, Portland General Electric, echoed the thanks and said that regulators want the effort to move forward quickly. And while it is, many in the region are cautioning that the regional adequacy question

should not have to be solved before IRP's are approved. "Let's be sure IRP's are not held up because of it," he said.

Scott Kinney, Avista, echoed his appreciation to Frank Afranji paraphrasing from Star Wars – You are our only hope. Afranji added, the Power Pool is offering learning opportunities to the PUC Commissioners in how the system works and resource adequacy will be added to the list of topics.

- **Kelcey Brown**, PacifiCorp, shared that they would be taking input on the acceleration of coal retirements through their IRP process as it is one piece that will inform their resource decision. The analysis continues – with more to come, she said.
- Bonneville's **Suzanne Cooper** proudly announced the Communications Group received national recognition for their "Hydro Flows Here" campaign. She also pointed to a May webinar that will outline major alternatives under consideration regarding the Columbia River System Operations – CRSO for those who live in acronyms.

Powerex's Resource Adequacy Overview

AS THE NORTHWEST EXPLORES ADEQUACY FROM A REGIONAL PERSPECTIVE

The Northwest is leaning into the resource adequacy question as policy and resource mix changes in the regional footprint continue to happen at a fast pace. As part of a greater conversation around development of a regional resource adequacy program in the Northwest, **Sauna McReynolds** invited **Mike Goodenough** and **Clarke Lind** from Powerex, to share their experience from a market perspective.

Market models differ, Goodenough said, yet they provide a critical function in the development of resource adequacy roles and responsibilities. A complex subject when you begin looking at key attributes of the programs in organized markets. Common to most are the obligation/cost allocation to load-serving entities; generation able to sell pre-defined quantity of resource adequacy capacity; and reliability of service being generally ensured through specific measures.

Without an organized market he continued, load serving entities have their own metrics which may be dissimilar – as is the case in the Northwest. This adds to the complexity of determining whether or not the region is adequate. As the region explores common characteristics, coal plants retire and California begins to implement new policy changes – curtailing exports at certain times to ensure supply in their footprint – defining resource adequacy requires a broader look.

Goodenough highlighted the similarities of resource adequacy programs throughout the organized wholesale markets and noted that CAISO is the exception in the area of governance, design and administration – with responsibility landing outside the CAISO –likely the result of a single state market.

He took a deeper dive into California’s current resource adequacy program that is undergoing a review led by the California PUC. With experience in the market, he highlighted areas of concerns that have been raised along with potential improvements being explored through the stakeholder process. With the “loss of money” issue among them. Again, he stressed the critical nature of ensuring the contribution of the resource is understood and not overstated. Setting the appropriate contribution of the resource is critical to a well thought out resource adequacy program.

Changes are underway, and they are likely impacting the Northwest because the import and export market in has expanded. The Northwest is no longer an island. The uncertainty in planning has resulted in different levels of excess in the time horizon. And there are concerns around centralized capacity markets with varying degrees of success attributed to them. Overall, there is a lower appetite for centralized capacity markets subject to FERC oversight.

Of course, the Northwest is accustomed to collaboration so as Goodenough described the differences between the Southern Power Pool Resource Adequacy Program and the CAISO program, PNUCC members were quick to recognize that in the Northwest where hydro is more likely to show up, it may be easier to build a multi-state model that is fair and objective.

Following a lengthy discussion with members and the Board, Goodenough closed by saying, “It is a challenge – having the discussion will ensure the region understands what is needed to be prepared to meet the challenge.”

“And given the pace of change, ensuring the tools are in place is a big step toward the future,” McReynolds added. “This will continue to be a conversation at PNUCC.”

Clean today. Cleaner tomorrow.™

IDAHO POWER LEANS INTO THE FUTURE

In a world where decarbonization is front and center, **Adam Richins**, Idaho Power, proclaimed they want to be a leader. Clean today. Cleaner tomorrow.™ reflects what they are already doing and sets an aspirational goal of being even cleaner tomorrow – 100% by 2045. It’s what their customers want, he added.

“So, what will the world be like in 2045?” Richins asked. If the rate of change toward adopting new technology is any indication, we’ve already surpassed the world envisioned in *The Jetsons* – a cartoon cast into 2062. A considerable buzz was in the room as we considered this while he embarked on explaining their thoughts behind the goal.

Making a commitment to serving their customers with clean, reliable and affordable energy will continue to be the hallmark of their 100-year history, Richins continued.

With that overarching goal in mind, Idaho Power will continue to build on that foundation to meet their aspirational goal of 100% clean energy by 2045. In the short term, it's a glide path away from coal by 2025 leaning into solar and exploring new technologies that don't yet exist to fill the balance of their resource portfolio in the future.



Key to a diverse, reliable and non-carbon future is transmission, Richins said. Long recognized as a need to meet the demands of integrating renewable energy, Idaho Power has been a partner in siting and investing in new transmission that will allow site-based renewable energy to make it to load. "Moving energy where it is needed, when it is needed requires transmission," he said. "And Boardman to Hemingway, Gateway and the Swift lines are critical to the West's energy future."

He reiterated that for Idaho Power, this future must be affordable and reliable. Hydro makes it possible and many Northwest utilities are on board committing to similar carbon-free goals. While it is an aspiration goal, Richins said, "Achieving clean energy together has changed the conversation and it is exciting to collaborate on a common goal. We have 25 years to get it done."

A friendly exchange of ideas between members ensued. All agreed that there are a lot of fresh ideas floating around and with the region working together there will be a solution for the Northwest. Richins said, it's an exciting time.

Overall, everyone agreed that once again the pace of change has set the stage for the rapid movement to continue the region's path toward clean energy. "We have a rich history of working together toward solutions because we care about our customers and the environment – and we will manage through it," Thackston added.

Plan to Reinvigorate Hydropower/Microsoft Energy

HYDROPOWER HAS IMPORTANT ROLE IN OUR CLEAN, RENEWABLE FUTURE

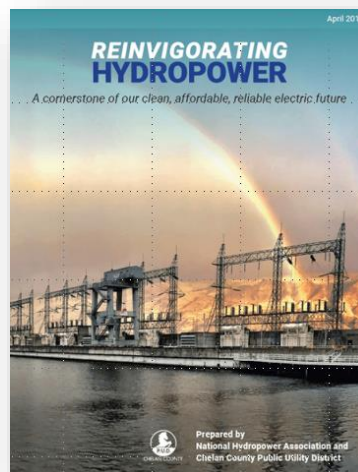
The recently released *Reinvigorating Hydropower* paper highlights the richness of the hydro system, according to **Robb Davis**, Chelan PUD. The Paper makes a "Call to Action" by identifying a range of policy recommendations. Hydropower needs to be part of the conversation when discussing resources, Davis continued.

For example, when aging infrastructure is refurbished, the value of this investment goes a long way because it meets criteria for clean, large market purchases similar to the one Chelan PUD recently entered into with Microsoft. In the new market, corporate buyers have a large presence in the renewable arena and

reinvestment meets the “additionality criteria” allows hydropower to fit nicely into their clean energy goals. As a result, Microsoft awarded Chelan PUD the contract to serve their headquarters with carbon-free electricity.

Davis reviewed the recommendations in greater detail. Ensuring solutions are technology neutral in market design is important and having the appropriate price signals values the resource – in this case the attributes for hydropower. Providing opportunities for existing hydropower resources to become a strategic opportunity for partnerships to meet well-developed environmental goals, provides a path to get a return on the investment and provides value for customers.

With the adoption of equitable policies, Davis said hydropower can continue to provide a path to an affordable, reliable and clean electric power system which is necessary to accomplish deep, economy-wide decarbonization. The *Reinvigorating Hydropower* paper can be found on the National Hydropower Association website at:



<https://anf5l2g5jkf16p6te3ljwwpk-wpengine.netdna-ssl.com/wp-content/uploads/2019/04/Reinvigorating-Hydropower.pdf>

Executive Director’s Report

McReynolds said in addition to the Report in the package, she wanted to remind the Board that the Budget Committee has refreshed the Reserve Policy and it will be mailed to members prior to the next meeting for action in June.

The *2019 Northwest Regional Forecast* has been published and was sent to members and others. She added, the State of the System will be presented to the Council and Power Pool over the next month. The joint System Planning Committee and Power and Natural Gas Taskforce *Electrification* paper is in its final form and out for review – in hopes of publishing this month as well. She extended special thanks to everyone who worked on it.

Finally, she said that staff has drafted resource adequacy statements for consideration by the Board. In addition, Scott Bolton, Franco Albi, Suzanne Cooper, Roger Gray and Paul Wetherbee offered to review them and provide comments prior to staff sending them to the full Board for discussion at the June meeting.

With that, the meeting was adjourned.

Attendees May 3, 2019 PNUCC Board Meeting

Shauna McReynolds	PNUCC	Judy Matheny	Central Lincoln PUD
Todd Simmons	Tillamook PUD	Clarke Lind	Powerex
Paul Wetherbee	Puget Sound Energy	Mike Goodenough	Powerex
Chad Bartram	Benton PUD	Roger Kline	Northern Wasco County PUD
Tom DeBoer	Snohomish PUD	Ron Davis	Emerald PUD
Chris Robinson	Tacoma Power	Jim Litchfield	Litchfield Consulting
Jason Thackston	Avista	Patti Chappel	Emerald PUD
Valarie Koss	PNUCC	Melinda James	Grays Harbor PUD
Tomás Morrissey	PNUCC	Sid Logan	Snohomish PUD
Scott Kinney	Avista	Harry Hewitt	Tillamook PUD
Debra Smith	Seattle City Light	Jason Williams	Flathead Electric Co-Op
Suzanne Cooper	Bonneville Power	Anne Spangler	Snohomish PUD
Franco Albi	Portland General Electric	Kurt Miller	Northwest RiverPartners
Mark Johnson	Flathead Electric Co-Op	Clay Norris	Tacoma Power
Sarah Edmonds	Portland General Electric	Diana Zorn	Western Energy Institute
Roger Gray	PNGC Power	Gary Boe	Flathead Electric Co-Op
Kevin Nordt	Grant PUD	Gary Huhta	Cowlitz PUD
Scott Coe	Emerald PUD	Aaron Bush	Public Power Council
Frank Afranji	Northwest Power Pool	Shay LaBray	Pacific Power
Annette Creekpau	Mason PUD 3	Ramon Mitchell	Pacific Power
John McFarland	Portland General Electric	Mitch Kunstel	Pacific Power
Dan Bedbury	Clark PUD	Gary Huhta	Cowlitz PUD
Rick Dunn	Benton PUD	Jane VanDyke	Clark Public Utilities
Robb Davis	Chelan PUD	Mark Ohrenschall	Energy NewsData
Stephan Boorman	Idaho Falls Power	Megan Capper	Eugene Water & Electric Board
Emeka Anyanwu	Seattle City Light	Barbara Miller	US Army Corp of Engineers
Cindy Wright	Seattle City Light	Susan Ackerman	Eugene Water & Electric Board
Jane VanDyke	Clark PUD	Holly Dohrman	Franklin PUD
Laura Trolese	Public Generating Pool	Scott Rhees	Franklin PUD
Doug Grob	Flathead Electric Co-Op	Tuuli Hakala	Chelan PUD
Mike Gardner	Tillamook PUD	Diana Zorn	Western Energy Institute
David Burt	Tillamook PUD	Bo Downen	Public Power Council
Doug Olson	Tillamook PUD		