

Evolved energy markets for a modern grid

October 1-2, 2024 Banff, Alberta Canada

Revised Agenda

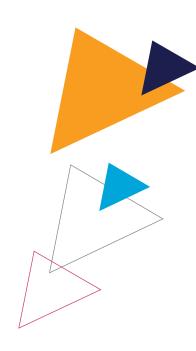
GridForward.org/GridFWD2024 | Presented by: GridForward



Innovative grid policies, technology and practices to modernize markets

Market operators and participants alike are feeling it: current markets are not architected to meet the conflicting demands of progressive public policies, advancing energy technologies and unprecedented extremes in threats to the grid. The diverse community that is modernizing the grid across the western US and Canada needs to rally around new market models that can lower risk and uncertainty while improving resource adequacy, resiliency and equity.

Grid Forward invites market makers, participants and solution providers to a unique event tailored specifically to explore innovations in market models for states, regulators, TSOs and DSOs to build and operate the modern grid. We'll paint the whole picture, from increasing market integration to community engagement, from drivers of resiliency and reliability to new ways to harness data for forecasting and planning.



Stakeholders from our region and beyond gather at GridFWD

At GridFWD 2024, we will come together to share new and expanding opportunities to refine market structures and supporting technology and techniques to foster modernization. We invite all stakeholders to join us this fall:

- **Utility leaders and market operator experts—**Learn and share best practices for planning, building, and managing resilient, flexible and sustainable energy systems as markets evolve.
- Executive and technical leaders of solution providers—Join your customers and other stakeholders as we sketch out how technology makes modern markets more effective.
- **Regulators and government officers**—Share best practices from across North America and other advanced markets, and make connections with those on the front lines.
- **NGOs and advocates**—Build the knowledge base and relationships to influence new programs that promote clean energy, equity and economic activity on regional energy systems.



"GridFWD 2024 comes at an exciting time full of both challenges and opportunities for our industry. Our customers depend on us to help them navigate the energy transition and enable electrification to support their changing energy needs. The move from molecules to electrons is driving fundamental shifts in energy markets driven by regulatory constructs and climate and energy policies. Industry and government must work together to ensure our grid and systems are reliable, sustainable, and affordable for our customers."

- Mark Poweska, President & CEO, ENMAX



Meet the people defining tomorrow's energy markets. Confirmed speakers leading sessions and discussions at GridFWD 2024



Emeka Anyanwu CEO, Lincoln Electric



Astrid Atkinson CEO & Co-founder, Camus Energy



Marguerite Behringer Director of Regulatory Policy and Industry Relations, Landis+Gyr



Mary BernardSupervisor, Residential
Program Performance, *IFSO*



Francis BradleyPresident & CEO, *Electricity Canada*



Aaron EngenPresident & CEO,



Peter Gregg, President & CEO, Nova Scotia Power



Hanna Grene Global GTM & Operations Leader for Energy, *Microsoft*



Adam Keech Vice President - Market Design & Economics, P.IM



Maureen Kolla, PhD. Project Lead, Alberta's Energy Future, *Energy Futures Lab*



Elliot Mainzer CEO, CAISO



Shawntia McNeil Energy Partner Ecosystem Manager, Global, NVIDIA



Lanny Nickell
Executive VP & CFO,



Mark Poweska
President & CEO,



Ravi Pradhan
Vice President of
Technical Solutions,



Julia Selker Director of Policy and Strategy, Chief Operating Officer, *Grid Strategie*s



Pam Sporberg Director of Transmission & Market Services, PGE



Megan Vetula, VP Federal Regulatory Affairs, *Berkshire Hathaway*



Paul Wetherbee Advisor, Regional Energy System Planning, PNNL



Audrey Zibelman



Register today

Make your travel plans soon!

Don't miss these featured sessions

Developments in energy markets... and where they're headed with executives from CAISO, SPP and AESO How grid operators are gearing up for market advances with executives from Nova Scotia Power, ENMAX and Electricity Canada Get ready for the next steps in western energy markets with E3 and Western Power Pool Working lunch:
Best practices in
mitigating wildfire
threats with AltaLink
and FortisBC

Plus a special First Nations welcome ceremony

Two full days of sessions, discussions and connections around energy markets.

	DAY 1: TUES	DAY, OCTOBER 1ST	
7:30 AM	Registration, breakfast & networking in Vistas		
8:15 AM	Opening plenary session and welcome with First Nation ceremonial blessing • Aaron Engen, Interim CEO, AESO • Elliot Mainzer, President and CEO, California ISO • Lanny Nickell, COO, Southwest Power Pool		
9:00 AM	Evolution of energy markets in the U.S. and Canada • Mary Weincke, Public Generating Pool • Debra Smith, former CEO, Seattle City Light	Leading the culture shift for the energy transition • Emeka Anyanwu, Lincoln Electric System • Michelle Vargo, Puget Sound Energy • Audrey Zibelman	
10:00 AM	Meters to markets: maximizing value for the customers • Cara Goldenberg, RMI • Colin Gibbs, Sense • Hala Saadi, EPCOR • Guillaume Paradis, Hydro Ottawa	How to implement collaboration locally and at scale • Maureen Kolla, Energy Futures Lab • Chris Henderson, Indigenous Clean Energy • Bethany Frew, NREL	Transition Today Case Studies on AI and edge resources (see page 7)
11:15 AM	Five huddle sessions (see page 6)		
12:00 PM	Working Lunch: On the Edge of U.S. and Canada Federal Funding: How the Grid Edge is Driving Resilience & Reliability • Larry Bekkedahl, Portland General • Marguerite Behringer, Landis+Gyr • Tim Weis, Natural Resources Canada • Hugo Perez, NERC		
12:30 PM	Grid Innovation Pitch Contest round 1 (see page 7)		
1:00 PM	Conference Connector Social Activities (In multiple locations on campus, see page 10 for descriptions)		
2:45 PM	The steps to make beneficial electrification truly beneficial David Morton, former chair BCUC Bruce Chapman, Christensen & Assoc. Tonja Leach, QUEST Lakshmi Alagappan, E3 Elias Lyberogiannis, Toronto Hydro	Centralized transmission planning: the means to make markets more modern • Julia Selker, Grid Strategies • Christine Drake, MISO • Sarah Edmonds, Western Power Pool • Neil Millar, California ISO	Transition Today Case Studies on Al and edge resources (see page 7)
3:45 PM	Five huddle sessions (see page 6)		
4:30 PM	Utility transformation in a modern market • Mark Poweska, President & CEO, ENMAX • Francis Bradley, CEO, Electricity Canada • Peter Gregg, CEO, Nova Scotia Power	Grid Innovation Pitch Contest round 2 (see page 7)	
5:00 PM	Networking Reception and Social		

- ▶ Plenary and main sessions
- ► Transition Today case studies
- ► Huddle discussions
- ► Grid Innovation Pitch Contest
- ▶ Connector Activities

Find the topics, activities and experts to sharpen your knowledge of energy market evolution

	DAY 2: WEDN	ESDAY, OCTOBER 2ND	
7:30 AM	Breakfast & networking in Vistas		
8:30 AM	Opening plenary session: Next steps for energy markets • Debra Smith, former CEO, Seattle City Light • Sarah Edmonds, President & CEO, Western Power Pool • Arne Olson, Senior Partner, E3 • Pam Sporborg, Portland General		
9:00 AM	Very Positive Potential: How VPPs and markets work together • Brian Koolman, The Adhoc Group • Neil Veilleux, Uplight • Dominic May, La Plata Electric • Tom Plant, Commissioner CO PUC • Angela Long, Rock Crest Consulting	Effective and efficient transitions to organized markets • Paul Wetherbee, PNNL • Ravi Pradhan, Siemens • Diane Brandt, Renewable Northwest • Kevin Dawson, AESO	Transition Today Case Studies on Al and edge resources (see page 7)
10:15 AM	Five huddle discusions (see page 6)		
11:00 AM	Conference Connector Social Activities (In multiple locations on campus, see page 10 for descriptions)		
12:30 PM	Networking Lunch in Vistas		
12:30 PM	Grid Innovation Pitch Contest Finals (see page 7)	Working Lunch: Best practices in mitigating wildfire risk • Gary Hart, AltaLink • FortisBC	
1:30 PM	The Next Frontier: Al at the Grid Edge • Marissa Hummon, Utilidata • Shawntia McNeil, NVIDIA • Marie Steele, NV Energy • Hubbell	Collaborating with customers to identify wildfire risks • Joe Rymer, PG&E • Jordan Folks, Opinion Dynamics	
2:00 PM		Advanced survelliance and wildfire awareness • Adam Burley, Rogers Communications • Sonia Kastner, Pano.ai • Anne Sherwood, Xcel Energy	Electricity Canada Working Group in Room 305
3:00 PM	Closing plenary session		
5:30 PM	Grid Forward and SGIN are cohosting a social event at the close of day 2		

- ▶ Plenary and main sessions
- ► Networking and activities
- ► Transition Today case studies
- ► Huddle discussions
- ► Grid Innovation Pitch Contest
- ▶ Connector Activities

"GridFWD 2024 is the premium utility event that brings together utilities, technology innovators, legislators and regulators in an intensive two-day discussion of the many issues facing the utility sector. GridFWD has been a mustattend event for me and anyone interested in exploring leading edge thinking about the electricity sector."

- Mark Kolesar, former chair, Alberta Utilities Commission



Bring your ideas and questions to the interactive huddle discussions

Smaller group format opens up information sharing

GridFWD 2024 huddle discussions are facilitiated by experts in each topic, but designed to make it easy to get to your most important questions. The event gives you three opportunities to jump in!

TUESDAY MORNING

Ensuring regional resource adequacy

• Elaine Hart, Momentum Energy • Stuart Mueller, E3

How to estimate, quantify and implement the value of resiliency investments

· Erik Ela, EPRI

How new tech is defining the control room of the future

· Abhinav Gupta, Grid Tranformation · Jill Searle, Nova Scotia Power

Getting the most from interregional planning and development

· Ahmed Maria, IESO · Barbara O'Neill, NREL

Flexibility in networks: An Australian and U.S. Perspective

• Brendan Banfield, Gridsight • Peter Kilby, Energy Queensland • Zach Pollock, Xcel Energy

TUESDAY AFTERNOON

What role will data centers play in energy markets?

· Jim Taylor, Siemens · Hany Soliman, Microsoft

Beyond FERC and NERC: The federal impact on energy markets

• Megan Vetula, Berkshire Hathaway Energy • Catherine Doherty, Bloomberg NEF

What nature can teach us about evolutionary models

• Brad Nickel, EQUS

Where advanced GETs can truly open up the pipes

· CTC · ATCO

How data architecture can help or hinder energy markets

WEDNESDAY MORNING

What are we learning from major market events?

· Adam Keech, PJM · ERCOT

When is a DSO really a DSO?

· Hayden Reeves, PNNL

Tariffs vs. Programs vs. VPPs: How to best incentivize DERs?

· Chris Sandbe, BC Hydro · Michael Blonsky, NREL

The latest in GHG tracking and attribution in energy markets

· Natalie Valentin, Granular Energy · Hallie Cramer and Neka Goka, Google

Power plays: Electric and gas operators take on electrification

Ahmed Hanafy, Dunsky

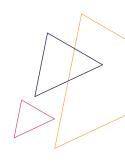








Transition Today case studies demonstrate how AI and edge resources are helping to open up energy market opportunities



THE ROLE OF RESOURCES AT THE EDGE	GETTING DATA RIGHT & THE PROMISE OF AI
Day 1: 10:00 AM — How data will be driving dynamic operating envelopes	Day 1: 10:25 AM — Putting AI to work for grid reliability, sustainability and decision making • Matt Futch, Black & Veatch • Harmeet Panesar, Ontario Energy Board
Day 1: 2:45 PM — Shining light on how to improve solar interconnections • Robert Deschamps, FortisAlberta • Lane Bozman, Clean Power Research	Day 1: 3:10 PM — The most promising applications: what's now and what's next for AI on the grid · Astrid Atkinson, Camus · Alexina Jackson, AES
Day 2: 9:00 AM — Building Canada's largest residential Virtual Power Plant in six months • Mary Bernard, IESO • Sanjay Pai, EnergyHub	Day 2: 9:25 AM — Early lessons in GenAl for the grid - getting comfortable with the future • Hanna Grene, Microsoft • Shiv Kumar, ENMAX

ENTER THE GRID INNOVATION PITCH COMPETITION

If you have an innovative technology or service for advancing grid modernization and facilitating energy markets, this is your chance: the annual Grid Innovation Pitch Competition. Enter now for your chance to:

- Receive coaching and assistance in attending GridFWD 2024
- Give your best pitch in front of our highly qualified audience
- Compete for prizes and investments (past winners received up to \$250,000)





Use this form

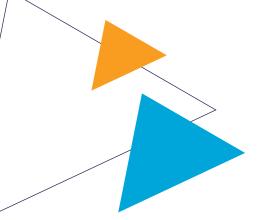
Deadline extended to August 20, 2024



Building on the energy and success of prior GridFWD events

GridFWD 2024 will continue to build and enhance the high quality content and energy of our well-known model-big enough to attract industry leaders and not too big for valuable face-face conversations. Attendees will have multiple ways to meet up with others, learn new ideas and best practices, and discuss important topics with peers.





GridFWD 2023 highlights

370+

Attendees



Representatives from DOE and USDA

31

Net Promoter Score



of respondents said it was a good use of their time



of respondents said it was better than other energy events



of respondents said they would attend again

GridFWD Seattle highlights

350+

Attendees



Representatives from U.S. Congress and Department of Defense

37

Net Promoter Score



of respondents said GridFWD Seattle was a good use of their time

25+

Conference and Huddle Sessions



Grid Innovation
Pitch Competitors

A dynamic balance of presentation content and personal connection

Grid Forward is planning a range of sessions and activities over the two days to help attendees achieve their goals for rebuilding connections and driving new initiatives.



EXPERT PANELS AND CASE STUDIES:

GridFWD 2024 will play host to some of the leading experts in market structures and modernization from the U.S. and Canada, plus our dynamic Transformation Today case studies.



INNOVATION PITCH CONTEST:

We will once again host our Grid Innovation Pitch Competition, with a special focus on technology as the foundation for modern markets. Competitors will vie in front of our audience for substantial awards.





HUDDLE DISCUSSIONS:

With so many industry issues and opportunities, GridFWD 2024 will offer a wide range of smallgroup discussions for sharing best practices and answering questions.



HIGH-IMPACT ACTIVITIES AND TOURS:

Taking advantage of our unique location, GridFWD 2024 will feature numerous special activities to help forge stronger connections with event attendees.

SOCIALS & NETWORKING:

GridFWD events are planned for the maximum amount of connections and conversations, providing value for all attendees and a chance to relax and reflect on the intense amount of information available.

Grid Forward is committed to once again combining timely, relevant content along with structured ways to meet with connections new and old to build relationships with people that can help in your work.



'Conference Connector' activities bring our sponsors and attendees together

As we did in GridFWD 2023, Grid Forward is organizing sponsored activities during the course of the event that will inform, revitalize and connect our participants in ways unique to the region. Participants may sign up for these activities after registering. First come, first served, but we will try to accommodate all requests.



Sponsor a Connector

Raise your profile and make closer connections by sponsoring a connector. Contact MaryJo@GridForward.org.



FIRST NATIONS CULTURAL CIRCLE: DRUM, DANCE AND SONG

First nation cultural awareness and experience — Participants will learn about the different songs and dances used for different occasions (pow wow, ceremony, prayer), ask questions about the regalia worn by dancers, and have the opportunity to participate in a round dance. Max 40 people.







THE MOUNTAINS, THE PEOPLE, THE STORIES

A walking history tour of the Banff region — Hear stories of First Nations People, the creators of Banff Park, early adventurers and more on this a 2.5 km round-trip with 100m elevation gain. Max 24 people.

Sponsor: 3 Utilidata



FORESTS, FIRE AND RESILIENCY STORIES

A guided talk and tour of the Banff Centre surroundings — In this inspiring walk around the beautiful campus, you'll see the dynamic of how trees in Banff have co-evolved with fire, with insights into what resilience means to the forests, to society and to you. Max 24 people.

Sponsors: SIEMENS PANO



DRAWN TO NATURE

Artist-facilitated drawing activity featuring Banff materials — Join an established Banff Centre artist as they lead participants through a drawing activity, featuring the iconic beauty of Banff. Using prepared and pre-designed materials, all participants will be able to produce a memorable take-away, regardless of art experience. Max 24 people.

Sponsor:



One sponsorship opportunity left.



TUNNEL MOUNTAIN HIKE

A perfect all-season, introductory hike to the area — this shapely mountain whose Indigenous name translates to Sleeping Buffalo brings viewpoints of Mount Rundle, Fairmont Banff Springs and the Bow River. The 4.4 km hike is rated "moderately difficult," with 261m of elevation gain. Max 30 people.



One sponsorship opportunity left.



E-BIKE TOUR OF TUNNEL MOUNTAIN TRAILS

Join a 90-minute tour through the picturesque trails system around the Tunnel Mountain reservoir. The group will accommodate different rider skill and fitness levels as it winds around Tunnel Mountain Reservoir and takes on mountain bike trails. Max 30 people.







An inspiring locale for insights and relationships to tackle today's most urgent market challenges

Banff, the location for GridFWD 2024, will continue the intimate, distraction-free experience that made GridFWD 2023 so rewarding. Together, we'll explore the evolution of western markets toward a common trading structure that can help all parties embrace renewable power and overcome resiliency challenges from extreme events.

Far away from the day-to-day, but easy to get to

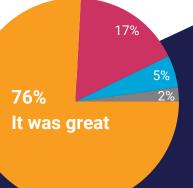
Calgary International Airport has regular flights from cities across Canada and U.S., just a couple of hours by air. Frequent shuttles navigate the 90-minute drive from the airport to Banff.

A conference locale like no other

GridFWD 2024 sessions and activities will take place at the Banff Centre for Arts and Creativity, one of Canada's most unconventional meeting venues. Hosting over 20,000 conference delegates from around the world every year, the Centre combines professional learning opportunities and breathtaking mountain vistas to create unforgettable experiences for all.

Attendees love destination venues

GridFWD 2023 survey respondents overwhelmingly appreciated having the event in a destination location outside of an urban setting.



76% - It was great 17% - It was good 5% - It was OK 2% - It was not good



Banff Calgary

Spokane

Boise

Denver •

Salt Lake City

Phoenix •

Vancouver

Portland •

Sacramento

Seattle



Make your plans now. Make your connections here.

Modern hotels and adventures high in the Rockies

GridFWD 2024 will take place in the Kinnear Centre, Banff Centre's newest meeting facility. Limited accommodations are available on campus primarily for sponsors and partners, and there are a host of hotels of all types within a 15 minute walk. Grid Forward will be running a shuttle between the main street and the venue for everyone's convenience. But, weather permitting, you'll want to stroll the streets of Banff.

Banff is a popular destination in the fall. Make your reservations soon!

There are a limited number of rooms left at the Banff Centre. **Click here** to contact them and use the code GFF2409.

Event discounts to a variety of properties

Banff Lodging Company manages a range of hotels, suites and condos around Banff, including the charming Moose Hotel with its authentic Canadian hospitality. They are offering a 15% discount to GridFWD 2024 attendees who provide the discount code *GF2024*. Click here to get started.

There are many other options not associated with the conference including the regal Fairmont Banff Springs, the ultra-modern Peaks Hotel, and the classic Banff Park Lodge Resort Hotel.

Transportation to and from the airport

Grid Forward has partnered with Banff Airporter for transportation to and from the Calgary International Airport. All GridFWD 2024 attendees can receive 15% off the cost by applying code *GridFWD2024* when booking at Banff Airporter.

If you choose to drive to the Banff Centre, parking is complimentary there and at most Banff Lodging Company accommodations.

Coinciding with Electricity Canada and Smart Grid Innovation Network events

GridFWD 2024 will coincide with two other important events in Banff. This is a great opportunity to make the best use of your travel time and create new relationships.

ELECTRICITY CANADA

Electricity Canada will hold its fall working meetings at the Banff Centre on October 2-3. GridFWD 2024 will have the opportunity to interact with their members.



SMART GRID INNOVATION NETWORK (SGIN)

SGIN will also be holding its Energy Innovation Forum Canada 2024 at the Moose Hotel & Suites in Banff on October 3. We invite SGIN members to register for GridFWD 2024 and join in the fun! Grid Forward and SGIN are cohosting a social event at the close of day 2.





Thanks to GridFWD 2024 sponsors

Your organization could join this group that defines the topics and experiences at GridFWD 2024.

Would you like to support GridFWD 2024?

Contact Bryce Yonker at bryce@gridforward.org







Presenting























Premier























Supporting



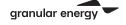




















Natural Resources Canada











Media Partners











Why take part in GridFWD 2024?

- There's never been a more important time to examine critical market dynamics and the challenges and opportunities for our energy systems
- Expert perspectives and guided discussions with market makers in Canada, the U.S. and beyond
- Presentations and case studies on new techniques and technologies for enabling market modernization
- Learn how peers are continuing to scale grid modernization across western U.S. and Canada
- · Deep-dive small-group discussions
- Unique and rewarding networking opportunities
- Revitalizing community gathering in one of North America's most beautiful locales



Presented by:



Register today



Logistics and registration contact:

Dustin Menger, dustin@sparkeventcollective.com

Sponsor and program contact:

Bryce Yonker, Executive Director & CEO, Grid Forward, bryce@gridforward.org

