Ensuring a Resilient 21st Century Energy System

Event Agenda

WiFi PW: BroncosWiFi

#GridFWD
Two Days Full of Insights, Best Practices, and Conversations

Plenary Sessions: with leaders from industry, technology, and government
Main Conference Sessions: interactive deep-dives led by today’s practitioners
Huddles: informal group discussions led by content experts, defined by participants
Networking: catch up with long time contacts and make new ones multiple times each day
Pitch Competition: Listen to the rapid fire overviews of grid innovation solutions

Join the Party at the Oct 25 Social Event
After the first day of the event we will unwind there at Empower Stadium with the East Club level all to ourselves. Reconnect with industry colleagues or meet new industry leaders with a view back at Downtown or if you’d like grab a seat in the stadium itself.

Don’t Miss the Grid Innovation Pitch Competition
Grid Forward is hosting the 2022 Grid Innovation Pitch Contest to feature early companies with breakthrough solutions to advance grid resiliency. Our expert judges will pick the winner, but attendees get to vote for their favorites as well. The companies selected for this year include:

- Amperon
- FlexCharging
- Kartorium
- Rhizome
- Sharper Shape
- Watts Battery
- WhyGrene
- SenSanna

Thank you to Pitch Contest Supporters
See Our Most Influential Speakers

Our grid is facing threats and impacts like never before. Explore the best solutions with the leading minds on how we harden our electric grid to meet the challenges it faces.

We have planned an array of topics and conversations around various grid resiliency areas including:

- Advanced forecasting
- Real time data management
- Integrated grid planning
- Grid hardening deployments
- Cybersecurity
- Wildfire mitigation
- Other grid resiliency capabilities
- Policy
- Regional Markets

Interactive Huddle Conversations Throughout The Gathering

Multiple times on each day of the event we will have the opportunity for group conversations on timely and important topics in the industry. Details will be in the app but discussion topics will include:

Oct 25th 12:00
- Innovation to Drive Resiliency Ahead
- Targeting Resiliency with DERs
- Cyber Security Plan Requirements for DOE Resources
- Community Partnerships for Wildfire Mitigation
- Getting Approval for Resiliency Investments

Oct 25th 4:00
- Development in Western Markets and Impact on Resiliency
- Creating Resiliency through Community Engagement
- Data to Balance Resiliency and Deep Decarbonization Strategies
- How to Advance Resiliency but Maintain Affordability
- Role of Hydrogen

Oct 26th 12:00
- Leveraging Advanced Tech to Address Wildfire Risk
- Too Much or Not Enough Data
- The role of Long Duration Storage
- Best Practices of Community Microgrids
- Alternative Funding Pathways to Advance Resiliency

Oct 26th 2:20
- Scaling Virtual Power as a Grid Level Resources
- EVs in a Resilient Grid
- Why Utility Digital Transformation is So Important
- Downstream Value by Managing Interconnection
Logistics for Attending GridFWD 2022

Transportation
The best way to get into town from the airport is on the train. Union Station is short walking distance from most hotels.

We will have a shuttle running in the morning on Oct 25th and Oct 26th from The Curtis Hotel to Empower Field and back to that same location in the afternoon both days. Getting to the stadium is a very quick Uber ride, a moderate 1.5 mile walk from most hotels, light rail and other options are available. Parking at the stadium will be free for anyone driving. Park on the south side of the stadium in lots A/B for quickest access to the gate 7 entrance.

All Details are in the Event App
The online platform for the event is on a system called EventMobi. The best way to use this is from a browser on your mobile device. See all the session details, see who is attending the event, make your plans and more. We are emailing confirmed attendees with login instructions but scan the QR code to login with your email.

Getting Around Mile High Stadium
The only entrance for the event is on the SE side of the building at Gate 7. Main sessions, meals, breaks, pitch contest and sponsor tables are on the concourse level called the East Club. Discussion breakouts are on the upper suite level from suite 423 to the Bud Light Champions Club

Special Rooms at the Stadium
**Speaker Green Room Suite 439** - 4th Floor Top of Escalators  
**Mothers Quiet Room Suite 275** - Below main session/club area  
**Sponsor Meeting Rooms: Suites 437-426**
Join Grid Innovation Site Tours on October 24

We have selected tours for the afternoon before the event for those coming into town before the conference starts. Space for these will fill up fast so confirm your place in registration by mid-September to ensure a place.

**National Renewable Energy Laboratory (NREL) Research Facilities**
The national lab facilities at NREL host industry leading capabilities for advanced grid research. The tour will take place at NREL’s Golden, CO campus and will focus on research capabilities for grid modernization and resilience. Attendees will tour multiple labs in the Energy Systems Integration Facility (ESIF) with active research on power system integration, buildings, electric vehicles, energy storage, and hydrogen. The tour will also showcase ARIES – NREL’s megawatt-scale platform that combines hardware testing with a virtual emulation environment powered by NREL’s 8-petaflop supercomputer.

*Tour Duration: 1:00-3:00PM*

**Colorado State Powerhouse**
A retired coal plant has been turned into a leading engines and advanced energy research facility at the CO State Campus in Fort Collins. Over 100K sq feet of space makes it one of the largest universities facilities in the country. After the university tour, the group will walk over to nearby New Belgium Brewery to see some of the advanced energy operations they have in place for powering their operations with clean energy.

*Tour Duration: 2:00-5:00PM (shuttle from Denver being organized)*

**Panasonic / Xcel Energy Microgrid**
This tour is located at the Panasonic smart mobility campus in east Denver. The location is where Panasonic is developing new products to make transportation smarter, safer, and cleaner. The Pena Station off the light rail hosts a solar carport, charging for EVs, batteries and advanced controls. Meet professionals from Panasonic and Xcel to hear about the Microgrid project, how its being used, and where similar efforts like it are heading.

*Tour Duration: 2:00-4:00*

RSVP by Sept. 30 with your tour preference here
Conference Sessions for October 25

8:30 Opening Plenary Session
• Remarks from US Congressman Joe Neguse

How Innovation Can Drive Critical Resiliency Capabilities Ahead
• A Fireside Chat with Audrey Zibelman of Google X, Juan Torres of NREL, and Norm Taffe, Generac

9:30 Federal Programs & Industry Plans to Rethink Resiliency
• Whitney Muse, US DOE Grid Deployment Office
• Anne Hoskins, Generac Power Systems
• Johanna Schmidtke, US DOE Loan Program Office
• Andrew Wills, Chief of Staff US DOE CESER Office
• Emeka Anyanwu, Seattle City Light

9:30 Tracking and Creating the Case for Grid Resiliency Investments
• M. Joe Zhou, Black & Veatch
• Carl Imhoff, PNNL
• Michael Levy, Guidehouse
• Eliza Hotchkiss, NREL

10:30 Morning Break and Grid Innovation Pitch Contest
• Amperon
• FlexCharging
• Sharper Shape
• Watts Battery

11:00 Community Resiliency: What Role Does the Grid Play
• Tim Coleman, Colorado Rural Electric Association
• Jonathan Koehn, City of Boulder
• Dennis Garrett, Blue Lake
• Jamie Charles, Sunnova
• Gregg Kresge, WRI

11:00 - Innovation in Undergrounding
• Josh Gould, Duquesne
• Philseok Kim, ARPA-E
• Jamie Martin, PG&E
• Jeremy Suard, Exodigo

12:00 - Huddle discussions on suite level
Cybersecurity Plan Requirements for DOE Funding
• Andrew Wills, US DOE CESER Office

Targeting Resiliency with DERs
• Sri Aditya Vemprala, Opus One
• Amanda Welch, BloombergNEF

Getting Grid Resiliency Investments Approved
• Elaine Prause, RAP

Innovation Driving Resiliency
• Larry Bekkedahl, Portland General Electric

Community Partnerships for Wildfire Mitigation
• Holly Woodings, United Power
• Paul Ondr, Timberline Fire Protection District
• Nate Whittington, Gilpin County

12:30 — Working Lunch with DOE Grid Deployment Office
Details for resiliency funding and programs with Whitney Muse, US DOE Grid Deployment Office

See full session details and join the conversation in the event app
1:30 Optimizing Distribution Grid Operations with Advanced Forecasting
- Abhineet Parchure, Amazon
- Mengmeng Cai, NREL
- Curt Kirkeby, Avista Utilities
- Dr. Eric Sortomme, OSI Aspen Tech
- Dr. Greg Ledva; Virtual Peaker

1:30 Westward Ho, Westward Slow, or Westward No?
– Pathways to an Organized Western Electricity System
- Jeff Ackermann, CO State Center for New Energy Economy
- Carrie Simpson, Xcel
- Xing Wang, Amazon
- Duane Highley, TriState
- Eric Blank, State of Colorado

2:30 Afternoon Break and Grid Innovation Pitch Contest
- Kartorium
- Rhizome
- SenSanna
- WhyGrene

3:00 Moving Forward Securely: Threats and Risks to the Modern Grid
- Jordan Henry, NREL
- Tabice Ward, Xcel
- Steve Parker, EnergySec

3:00 Steps to Grid Resiliency by Engaging and Empowering EV Owners
- Erin D’Amato, Uplight
- Connie Paoletti, Xcel Energy
- Nick Esch, Wood Mackenzie
- Bianca Sloma, Qmerit
- Hilary Polis, Opinion Dynamics

4:00 Huddle discussions on suite level

Best Practices of Community Microgrids
- Jessica Lau, Xcel
- Josh Snodgrass, POWER Engineers

Data to Balance Resiliency and Deep Decarbonization Strategies
- Raj Singam Setti, Platte River Power Authority
- Young Ngo, Survalent

The Role of Hydrogen
- Omar José Guerra Fernández, NREL

How to Advance Resiliency but Maintain Affordability
- Commissioner Megan Gilman, CO PUC
- Andy Eiden Portland General Electric

Creating Resiliency through Community Engagement
- Charity Fain, Community Energy Project
- Shiloh Costello, SMUD

4:30 Networking Social
Join us in the East Club of Empower Stadium for networking with industry leaders. Find a new friend and take a seat in the arena, find a long-time colleague and take a place at the bar, or meet up at one of the sponsor tables — there will be lots of options.

Tours of Empower Field will be available.
Grab a long time contact or new friend and see the locker room, walk onto the field and more.
Conference Sessions for October 26

8:30 Opening Plenary Session
• Remarks from CO State Senator Chris Hansen

Putting Grid Resiliency Plans into Action
• Conversation led by Bryan Hannegan, Holy Cross Energy with
  • Jessica Matlock, La Plata Electric
  • Tracey Lebeau, WAPA
  • Duane Highley, TriState
  • Larry Bekkedahl, Portland General Electric

9:30 — State Resiliency Plans & Industry Opportunities
• David Bobzien, State of NV
• Keith Hay, State of CO
• Rob Del Mar, State of OR
• Mona Sheth, Schneider Electric

9:30 - Aligning Analytics with Grid Modernization Strategies
• Andrew Braeger, Tacoma Public Utilities
• Ellie Lynch, EN TRUST
• Kelly Strand, SnoPUD
• Joe Sullivan, Pxise
• Ankush Agarwal, Exelon
• Bilal Khursheed, Microsoft
• Joe Sullivan, Pxise

10:30 Morning Break and Pitch Content Finals

11:00 — Managing the Grid in Extreme Weather Conditions
• Bill Messner, Portland General Electric
• Amanda Myers Wisser, WeaveGrid
• Craig Holt, Xcel Energy
• Maya Wolf, PG&E

11:00 — Best Practices of Applying Telemetry for Grid Resiliency
• Marissa Hummon, Utilidata
• Ananth Sundaram, Portland General Electric
• Bryan Hannegan, GM, Holy Cross Energy
• Kevin Ludwig, Black & Veatch

12:00 - Huddle discussions on suite level

Leveraging Advanced Tech to Address Wildfire Risk
• Sonia Kastner, Pano
• John Hansen, TriState

The Role of Long Duration Storage
• Vince Sprenkle, PNNL

Too Much or Not Enough Data to Make Grid Resiliency Decisions
• Carol Bogacz, 1898 & Co
• John Lemmon, Microsoft

Role of Organized Markets in Maintaining a Resilient Grid

Alternative Financing Solutions for Resiliency Investments

12:30 — Working Lunch with DOE Loan Program Office
Learn about grid related resources for transmission, virtual power and more from
Johanna Schmidtke, US DOE Grid Deployment Office, and Yonatan Abebe, US DOE Loan Program Office
1:20 — Advancing Interconnection to Meet Grid Needs
- Larry Sherwood, IREC
- Katherine Wyszkowski, Sunnova
- Cory Luker, Cadeo

1:20 — Policy to Unlock the Value of Microgrids for More Communities
- Dan Lauf, National Governors Association
- Keith Hay, State of CO
- Allie Detrio, Reimagine Power
- Dan Shea, NCSL
- Will McCurry, NARUC

2:15 Huddle discussions
- Scaling Virtual Power as a Grid Level Resource
  - Josh Keeling, Generac
  - Johanna Schmidtke, US DOE Grid Deployment Office
- EVs in a Resilient Grid
  - David Logsdon, Seattle City Light
  - Kevin Schwain, EnergyHub
- Why Digital Transformation is So Important
  - Vanessa Barbarisi, AES
  - Cindy Schweitzer, Uplight
- Downstream Value from Managing Interconnection Process
  - Alan Saunders, Clean Power Research & City of Ft Collins

3:00 Closing Session
Now What: How to Advance Grid Resiliency in Real Life — A discussion with CO PUC Chair Blank

Thanks to All Who Help Make GridFWD Possible

We want to thank all the team members at Grid Forward for their efforts to organize all the aspects of this gathering. Thanks also to all the volunteers who help in every part of this activity. Thanks to supporters in the local Denver community who have been gracious hosts in having this event in their community. To everyone who helped with ideas for the agenda, partners to help share work, and so many other aspects, thank you!

See full session details and join the conversation in the event app
Following COVID Guidelines For Your Safety

The GridFWD event will follow any remaining COVID requirements from Denver County and the State of Colorado to have a safe gathering. Our health and safety protocols for the event (which will be updated online) include:

- Vaccination recommended (we are not screening for vaccine status for this gathering)
- Mask recommended (we will provide if anyone would like one)
- Name badge notation of comfort level with contact (selected at on-site registration)
- Testing available to anyone interested
- Extra sanitation throughout venue
- Safety point-of-contact in place for monitoring and support
- Physical distancing when possible
- Training and preparation with team
- Cleaning of spaces
- Everyone pitching in to support a safe gathering
- Ample event space for comfortable gathering
- Reminder to everyone — If you do not feel well, please do not attend

Grid Forward works to ensure the safety and comfort of all event participants. Attendees join any gathering on their own will, and in doing so agree to not hold Grid Forward liable for any illness or other impacts that may occur directly or indirectly from their participation in the event.

Special Thanks to our Lead Sponsors and Regional Hosts

Lead

National Renewable Energy Laboratory (NREL), focused on creative answers to today’s energy challenges. From breakthroughs in fundamental science to new clean technologies to integrated energy systems that power our lives, NREL researchers are transforming the way the nation and the world use energy. NREL advances the science and engineering of energy efficiency, sustainable transportation, and renewable power technologies and provides the knowledge to integrate and optimize energy systems. As part of its efforts NREL focuses on energy security and resilience, integrated energy solutions, and grid modernization in its Energy Systems Integration Facility (ESIF).

Founded in 1965, Pacific Northwest National Laboratory (PNNL) is operated by Battelle for the U.S. Department of Energy’s (DOE) Office of Science. PNNL advances the frontiers of knowledge, taking on some of the world’s greatest science and technology challenges. Distinctive strengths in chemistry, Earth sciences, biology, and data science are central to the Laboratory’s scientific discovery mission. PNNL’s research drives innovations that enable sustainable energy through decarbonization and energy storage and enhance national security through nuclear materials and threat analyses. The Laboratory is a leader in advanced grid research and collaborates with academia and industry on a number of grid modernization and resiliency efforts.

GridFWD 2022 hosted by Colorado Public Power
We're Grateful to All Our GridFWD 2022 Sponsors

Visit many of the event sponsors at their booth space on the main concourse level of the venue. Exhibit times are open during breaks and networking portions of the event.
Grid Forward is a 501(c)(6) non-profit, member-driven trade association dedicated to promoting and accelerating innovation on the regional electric system. We deliver community, expertise and resources for leaders who are working to modernize the grid. Learn more and become a member at GridForward.org.

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