

# Resilient Electric Grid Consortium of North America Symposium 2022 (RECONS 2022)

Texas A&M Engineering Experiment Station Smart Grid Center (SGC)

Department of Electrical and Computer Engineering  
Energy and Power Group (EPG)

Room 1107-1108  
Center for Infrastructure Renewal (CIR), Texas A&M University System  
1041 RELIS Parkway, Bryan TX 77807

Thursday, November 17, 2022

## Agenda

**8:30 – 9:00** Arrival and check in; light continental breakfast provided

### **Session 1: Tom Overbye (Chair) (9 to 10:20, Room 1107-1108)**

**9:00 – 9:20** Welcome and Introduction (Thomas Overbye, ECE TAMU), [Slides](#)

**9:20– 9:40** “Environmental and Equity-Aware Electric Grid Optimization: An Example based on Wildfire Risk Mitigation” (Line Roald, University of Wisconsin – Madison), [Slides](#)

**9:40 – 10:00** “Earthquake and Coastal Resilience in the US Pacific Northwest: A Marine Perspective to Electrical Infrastructure” (Eduardo Cotilla-Sanchez, Oregon State), [Slides](#)

**10:00 – 10:20** “Resiliency to Ransomware” (David Nicol, University of Illinois at Urbana-Champaign), [Slides](#)

**10:20 – 10:40** Break

### **Session 2: Ashlynn Stillwell (Chair) (10:40 to Noon, Room 1107-1108)**

**10:40 – 11:00** “Leveraging Machine Learning to Predict Power Outages during Winter Storm Uri” (Stephanie Paal, TAMU), [Slides](#)

**11:00 –11:20** “Scalable Human-Centered Demand Flexibility in Extreme Events (Le Xie, TAMU), [Slides](#)

**11:20 – 11:40** “Technical, Environmental and Social Challenges of Building Resilient Electrical Grids in México”, (Miguel Robles Pérez, National Autonomous University of Mexico), [Slides](#)

**11:40—Noon** “Resiliency as Shaped by Climate Change and Environmental Justice”, (Judy Cardell, Smith College and Jess Wert, TAMU), [Slides](#)

## Lunch (Room 1107-1108) and Control Room Hands-On Activities and Demos (Rooms 3339 and 3350)

**Noon – 13:10** Lunch at Pre-function Area; Control room Hands-on Activities in Rooms 3339 and 3350

### Session 3: Line Roald (Chair) (13:10 to 14:30, Room 1107-1108)

**13:10 – 13:30** “Grid and Community Resilience” (Zhihua Qu, University of Central Florida), [Slides](#)

**13:30 – 13:50** “Enhancing Power Grid Resiliency with Microgrid Restoration” (Karen Butler-Purry, TAMU), [Slides](#)

**13:50 – 14:10** “Rapid Method for Impact Analysis of Grid-edge Technologies on Power Distribution Networks” (Antoine Lesage-Landry, Polytechnique Montréal), [Slides](#)

**14:10 – 14:30** “Virtual Water Transfers as a Consideration for Grid Resiliency” (Ashlynn Stillwell, University of Illinois at Urbana-Champaign), [Slides](#)

**14:30 – 14:50** Break

### Session 4: Adam Birchfield (Chair) (14:50 to 16:30, Room 1107-1108)

**14:50 – 15:10** “Linking K-12 Teaching and Mentoring Programs with Research in Electric Power Grids” (Cynthia Lima and Niko Gatsis, University of Texas at San Antonio), [Slides](#)

**15:10 – 15:30** “Using a Risk Metric to Understand the Impact of Real and Potential Grid Changes on Risk and Resilience: Cordova as a Case Study” (David Newman, University of Alaska), [Slides](#)

**15:30 – 15:50** “Cyber-Attack Detection for Power Systems based on Nonlinear Spatial-Temporal Modeling.” (Dongliang Duan, University of Wyoming), [Slides](#)

**15:50 – 16:10** “The Electric Distribution System and Resiliency” (Miroslav Begovic, TAMU), [Slides](#)

**16:10 – 16:30** “Electric Energy System Decarbonization Strategies and Resiliency” (Lindsay Anderson, Cornell), [Slides](#)

**16:30** Adjourn

## Logistics

The event will be held at the Texas A&M Center for Infrastructure Renewal (CIR). CIR is on the Texas A&M RELLIS campus. For parking at CIR, TAMU parking permits apply, otherwise \$7/day parking fee can be paid during registration and when entering to the CIR building you must provide your car’s license plate number at the front desk.

For any issues associated with the event contact either Tom Overbye ([overbye@tamu.edu](mailto:overbye@tamu.edu)) or Andrea Kishne ([akishne@tamu.edu](mailto:akishne@tamu.edu), office: 979-317-1285); the CIR conference wing contact is Tania Wolf ([tania.wolf@tamu.edu](mailto:tania.wolf@tamu.edu)).