GridWise® Architecture Council

Meeting Minutes

Aug. 19, 2026

GWAC Members

Ron Bernstein, GWAC Chair, President, RBCG, LLC

Kay Aikin, Founder, Chief Product Officer, Dynamic Grid/Introspective Systems, LLC

Ron Ambrosio, Independent Energy Transformation Professional

Ron Chebra, Executive Director, Chebra Consulting Group

Marc Costa, Director of Policy Planning, the Energy Coalition

Matthew McDonnell, Managing Partner, Current Energy Group

Mark Ortiz, Sr. Director & Chief Architect Power & Grid, Schneider Electric

Farrokh Rahimi, Executive Vice President, Open Access Technology International, Inc.

Aaron Snyder, Dir. of Grid Technology Consulting, EnerNex

GWAC Associates & Emeritus

Rahul Bahadur, Associate

Ron Cunningham, Emeritus

Mark Knight, Emeritus

GWAC Friends

Lisa Affolabi

Larisa Dobriansky, General Microgrids

Alaa Mahjoub, Independent Digital Business Advisor

James Orenstein, TRCSS

Lane Smith, Standford University

Tim Schoechle

Ken Wacks

David A. Wollman, NIST

Guest Speaker

McGee Young, WattCarbon

PNNL Support

Jaime Kolln, PNNL GWAC Administrator

Susie McGuire, GWAC Coordinator

Meeting Minutes

Aug. 19, 2026



Meeting Minutes

Aug. 19, 2026

GRIDWISE Architecture Council

Agenda

Call to Order and Roll Call
- Welcome

GWAC Administrative Business
- Minutes
- Upcoming events
- GWAC Accomplishments
- Action Items

Guest Speaker
- **Matt McDonnell, Current Energy Group. "The State of Play: *DER Policy Takeaways from the 2026 NARUC Summer Policy Summit*"**

Work Product Status Reports
- Grid Arch for Regulators White Paper – presentation from Matt McDonnell
- Grid Architecture Concept Model for Transportation Electrification
- New Work Products Update

Future Activities
- GWAC Outreach
- Planning 2027 GWAC Symposium

Liaison Reports

New Business

Farrokh Rahimi said OATI will have a special meeting in October. Jaime Kolln said it is posted on LinkedIn and looks very interesting. Farrokh said that it is open to everyone interested.

Chairman Ron Bernstein called the meeting to order with Quorum at 8:19am

Jaime reviewed the agenda and asked if there was a motion to approve the July GWAC Meeting Minutes.

Ken Wacks noted that he did not attend the previous meeting, he had no comments.

Chair Ron Bernstein said he had not had time to review them and asked to postpone approval until next month. The motion was approved.

GridWise® Architecture Council

Meeting Minutes

Aug. 19, 2026

Conferences and Events

GRIDWISE Architecture Council

Date	Event	Location	Attend	Speaker	Topic/Notes
July 19-23, 2026	IEEE PES General Meeting	Montreal, Canada	Farrokh Rahimi, Shawn		Powering the Digital Era
July 19-22, 2026	NARUC Summer Policy Summit	Minneapolis, MN	Kay Aikin	July 19-22, 2026	NARUC Summer Policy Summit
Aug. 12-13, 2026	RE+ Mid-Atlantic 2026	Philadelphia, PA			
Sep. 1-4, 2026	Middle East Energy Leadership Summit	Abu Dhabi, UAE	Ron Bernstein	Ron Bernstein	Panel participant-Digital Strategies for Corp. Transformation
Sept. 1-3, 2026	T & D World	Orlando, FL	Ron Chebra		
Nov. 8-11, 2026	NARUC Annual Meeting & Education Conf	Puerto Rico			
Nov. 16-19, 2026	RE+ 2026	Las Vegas, NV	Kay Aikin, Shawn, Jaime		Renewing What's Possible
Nov. 19-21, 2026	Decentralized Energy Canada	Banff, Alberta	Kay Aikin	Kay Aikin	
Jan. 6 - 9, 2027	Consumer Electronics Show	Las Vegas, NV	Ken Wacks		
Jan. 25 – 27, 2027	AHR Expo 2027	Chicago	Ron Bernstein, Shawn Chandler		NRECA is a host
Feb. 14 – 17, 2027	Tech Advantage 2027/Power XChange	San Diego, CA			
Mar. 1-4, 2027	DTECH	Atlanta, GA	Aaron Snyder, Farrokh Rahimi		
March 16, 17, 18	GWAC Symposium	Tampa, FL	GWAC		
April 19 22, 2027	IEEE PES Grid Edge Technologies Conference	Salt Lake City, UT	Farrokh Rahimi, Jaime Kolln		

Farrokh Rahimi provided some comments on the July 2026 IEEE PES meeting.

Chair Ron Bernstein has a speaking engagement in Abu Dhabi next month. He made a post on LinkedIn and would like the GWAC to help socialize his post.

Ron B. noted that he received a request guest speaker at an Energy Summit in Nigeria in October. If anyone is interested, it would be a keynote address about changes in North American Power Grid. This request came through his connection with ASHRAE. The general topic area is building to grid.

Aaron Snyder asked Ron Bernstein to send him an email about it – he may consider it and has some insights.

Kay also has some business interest there.

Ron B. will follow up and introduce each of them to the conference chair online.

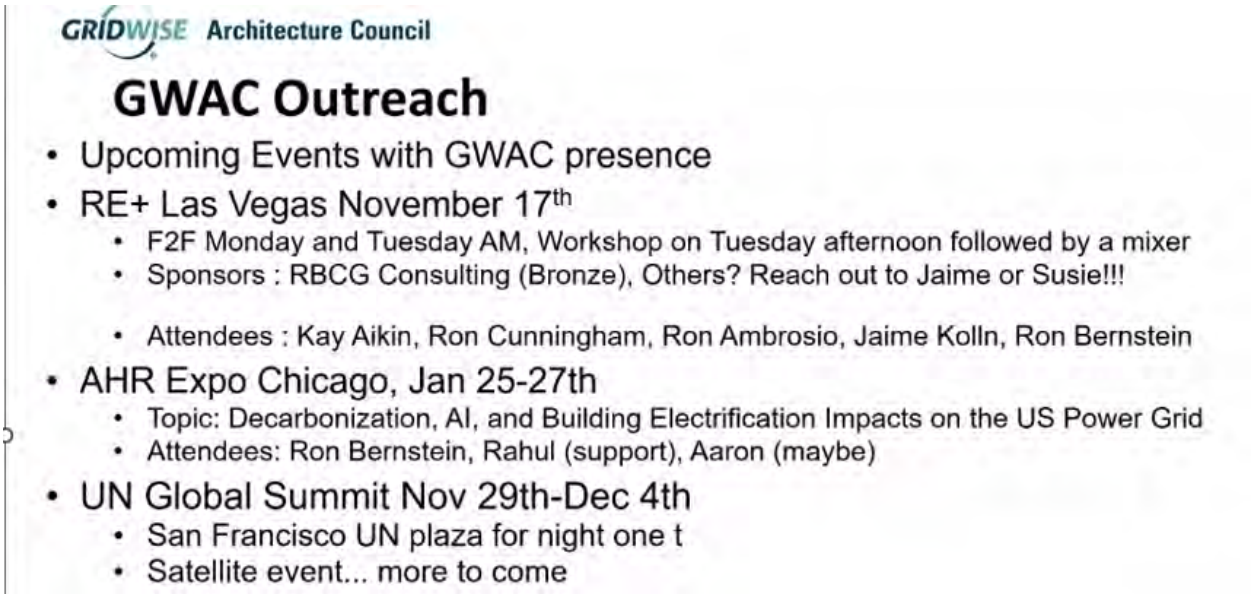
GRIDWISE Architecture Council

GWAC Outreach

- Upcoming Events with GWAC presence
- RE+ Las Vegas November 17th
- **Webinars – volunteers needed.**
  - **First Week of August 25th "Bridging Back" by Ron Ambrosio, 10AM PT**
  - **Early September "for Regulators"??**
  - **Late September "Transportation Concept Model"?**

Matt McDonnell is planning to present a seminar on the Regulators paper, possibly in mid-September.

Jaime commented that late September or early October would be a good time to present the webinar for the Transportation Concept Model.



Ron Bernstein reviewed the schedule for GWAC at RE+ Las Vegas.

He noted that the GWAC Tutorial Workshop will be held on Nov. 17th.

Also, there will be a GWAC Face to Face all day on Monday Nov 16 and the morning of Nov 17.

The RE+ location for both the F2F and the Tutorial Workshop will be at the Las Vegas Convention Center on Tuesday Nov. 17. The Monday morning workshop is to be determined, but not at the Convention Center.

Ron B. asked the group who is available to attend:

The reply was that Kay Aikin, Ron Ambrosio, Ron Bernstein, Ron Cunningham, Jaime Kolln, and Vanessa Whitten, PNNL, will be attending.

Ron Bernstein will follow up with Aaron Smallwood to confirm.

Marc Costa is not yet able to confirm due to schedule conflict. He is trying to work it out.

Mark Ortiz is in a similar situation with conflicting travel commitments. He is trying to work it out.

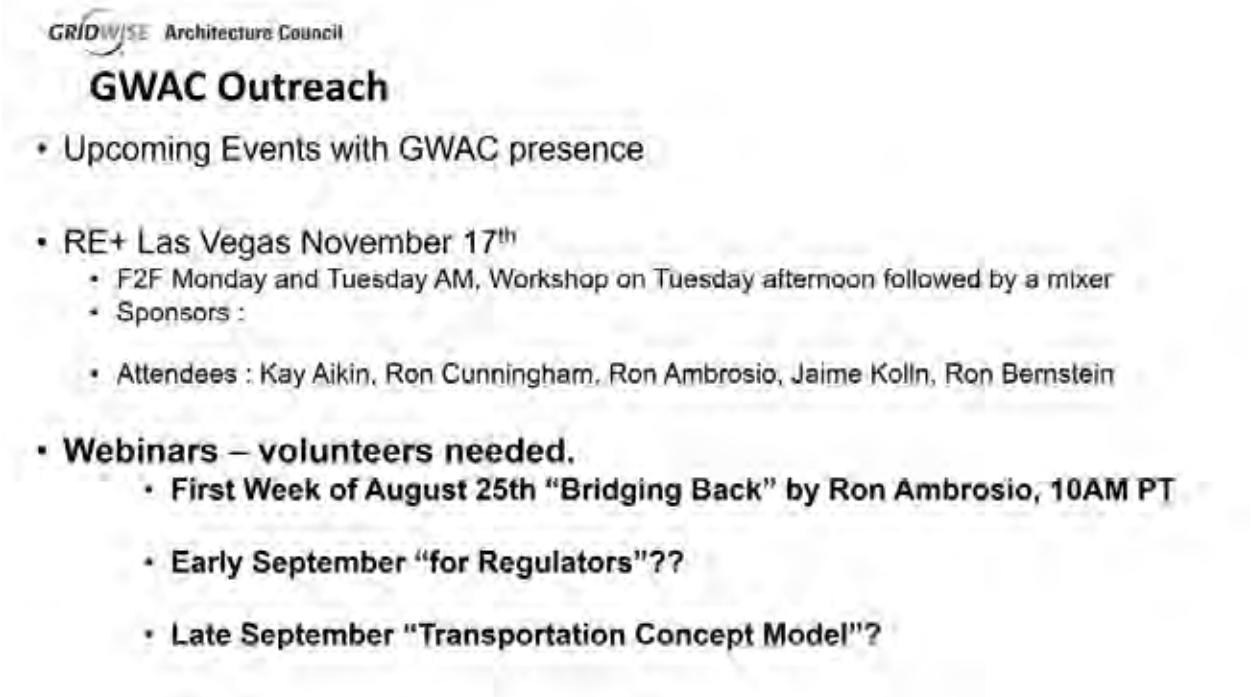
Shawn Chandler also has conflicts and is uncertain.

Matt McDonnell is not able to attend.

Aaron Snyder is likely not going to be able to attend.

Ron B. noted that there are 5 GWAC members including Jaime, who will be there.

RE+



The group discussed sponsorship for GWAC at RE+ Las Vegas.

There would be 3 levels: $500, $1000, $1500.

Ron B. said he has committed his company at $500. (Bronze level) He encouraged the GWAC to support the event in socializing sponsorship opportunities.

AHR Expo – January 2027 – Jan 25, 26, 27 in Chicago

Chair Ron Bernstein has submitted the proposed GWAC Seminars to the AHR Expo.

The first is the typical GWAC tutorial.

Shawn Chandler uncertain if he will be able to attend.

Matt McDonnell is not able to attend.

Rahul Bahadur will check his schedule; he would like to attend.

Aaron Snyder will check his schedule.

Jaime Kolln said he can't commit anything in January.

Matt McDonnell said he has some prior commitments in that time frame; he will look more closely and see if he can work it out.

Marc Costa has a conflict with the Global Summit, a United Nations event, Nov. 29 – Dec. 4. in California. Marc is involved with planning the agenda. He would like to have a GWAC presence at the Global Summit. They are expecting 200 attendees. Sponsors are needed for it. Some of the meeting will be held at the UN Plaza in San Francisco. Kay Aikin is also involved with it.

Most of the meeting will be at Stanford University. The opening night will be held in San Francisco.

Farrokh Rahimi requested the URL for the event; he may be able to attend.

Farrokh expressed his support for a Job Fair at the GWAC RE+ Symposium.

GWAC Symposium

Jaime Kolln led a discussion about a poster session for a job fair.

Ron Ambrosio said that the students attending, particularly those involved with the IEEE Student Chapters, may want to support a job fair event at the Symposium.

Jaime said there will be tables available for sponsors, if we have enough tables then they are welcome to have a job fair.

Ron Berstein noted that the date will be during Spring Break.

Ron Ambosio said there will be students around – many don't leave for Spring Break.

Ron B. and Ron A. agreed that the students can be the ones to coordinate a job fair.

Jaime suggested the group talk more about a job fair at the next meeting informally. He agreed that GWAC is open to the idea, and he noted that student attendees can always talk to the Sponsors at their tables. He said to help facilitate interactions, QR coded materials set out at the meeting can be helpful.

Room Costs

Ron Ambrosio noted that the Tutorial, which is scheduled before the Symposium, won't require the full ballroom. He said that there is a nice 30 person room available, with a conference table with AV for the face to face meeting.

Ron Ambrosio mentioned that the student council space, on the top floor, holds 70 people with the option to hold 30 additional people. He felt this should be sufficient for the tutorial workshop.

He noted that GWAC staying 1 extra hour for the reception will require an extra $500 in cost for the room going over the standard closing time. That will only happen on one of the days.

Ron Ambrosio also noted that reserving this much space this far in advance was more than the students were allowed to do so he went through the Electric Engineering Department, headed by Professor Naw Tin, since the department gets a discounted price for the space on behalf of GWAC.

Ron A. also mentioned that dividers will be up in the morning for breakouts.

Ron A. has asked to lay out the tables in a way that will allow the divider walls to be closed.

Some GWAC participants asked about the stage set up and where the AV equipment would be located.

Ron A. said the "A" section will have the AV equipment.

Jaime Kolln introduced today' guest speaker.

Meeting Minutes

Aug. 19, 2026

GRIDWISE Architecture Council

Guest Speaker: Matt McDonnell, Current Energy Group



State of Policies – NARUC Summer Policy Summit

Matthew McDonnell: Experienced energy attorney and regulatory policy expert. Support electric utilities, energy companies, and regulators across numerous domains, including power system planning, grid modernization, community solar, renewables integration, distributed energy resources (DER), advanced demand response, and community solar, with a focus on emerging electric utility regulatory and business models.

Meeting Minutes

Aug. 19, 2026

CURRENT ENERGY GROUP

GRIDWISE Architecture Council

The State of Play: DER Policy Takeaways from NARUC Summer Policy Summit

GridWise Architecture Council | Monthly Meeting

August 19, 2026

An Electricity System Increasingly Under Pressure

Affordability, **reliability**, and **rising demand** are pressuring **customers**, **utilities**, and the **electric system** alike. The conventional electric system model is **failing** to solve these **pressures** and, in some important respects, **contributing** to the problem itself.

Converging Pressures on the Distribution System

- One-in-six households in the United States were behind on energy bills as of May 2025.
- Anticipated load growth require substantial new investment in energy resources and quick interconnection timelines.
- On average, power lines and transformers are over 25 years old.
- Utility investments in replacing and hardening the grid have increased costs for customers in significant portions of the U.S.

Conventional Approaches Compound the Challenge

- Capital bias creates a structural preference for the most expensive utility-owned solution.
- Centralized planning and dispatch fail to integrate distributed resources, often under-counting available resources and overbuilding infrastructure.
- Absence of competitive approaches forecloses alternatives before they can be evaluated.

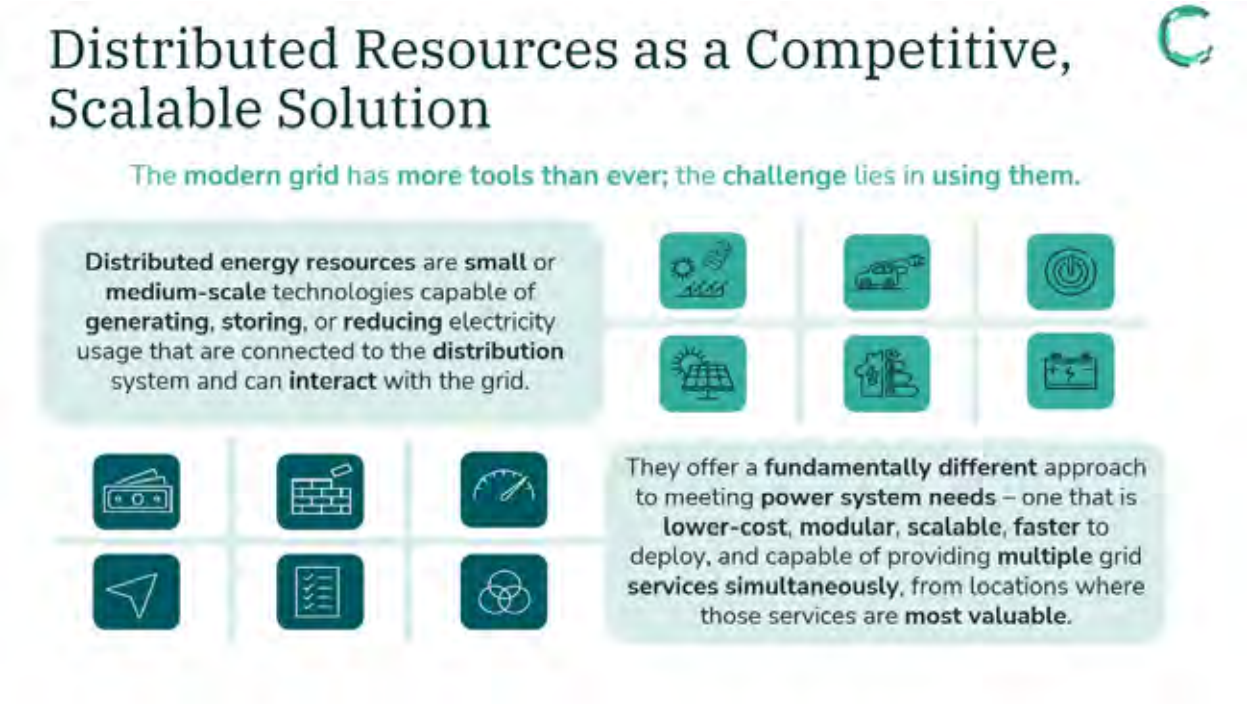
There is just as much focus on affordability with states and utilities. A focus on impact on rate increases.

One of the keynotes was from a national meteorologist and broke out impacts of extreme weather events and grid impacts.

Each challenge is a barrier for regulators.

How to tackle challenges in a comprehensive way.

How to break out of a paradigm where DER was in the corner.

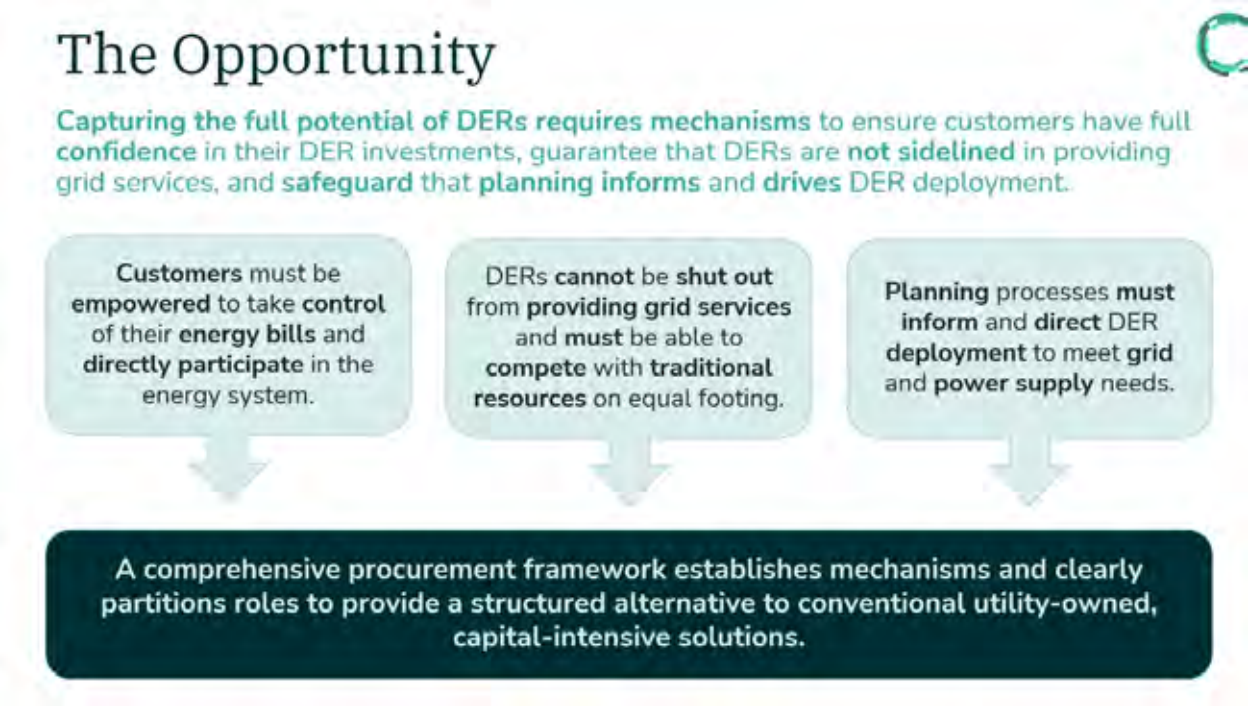


Ken Wacks asked about uniform trends.

Matt said almost nothing was uniform, he is generalizing. There is quite a variance of viewpoints from regions and state by state and more.

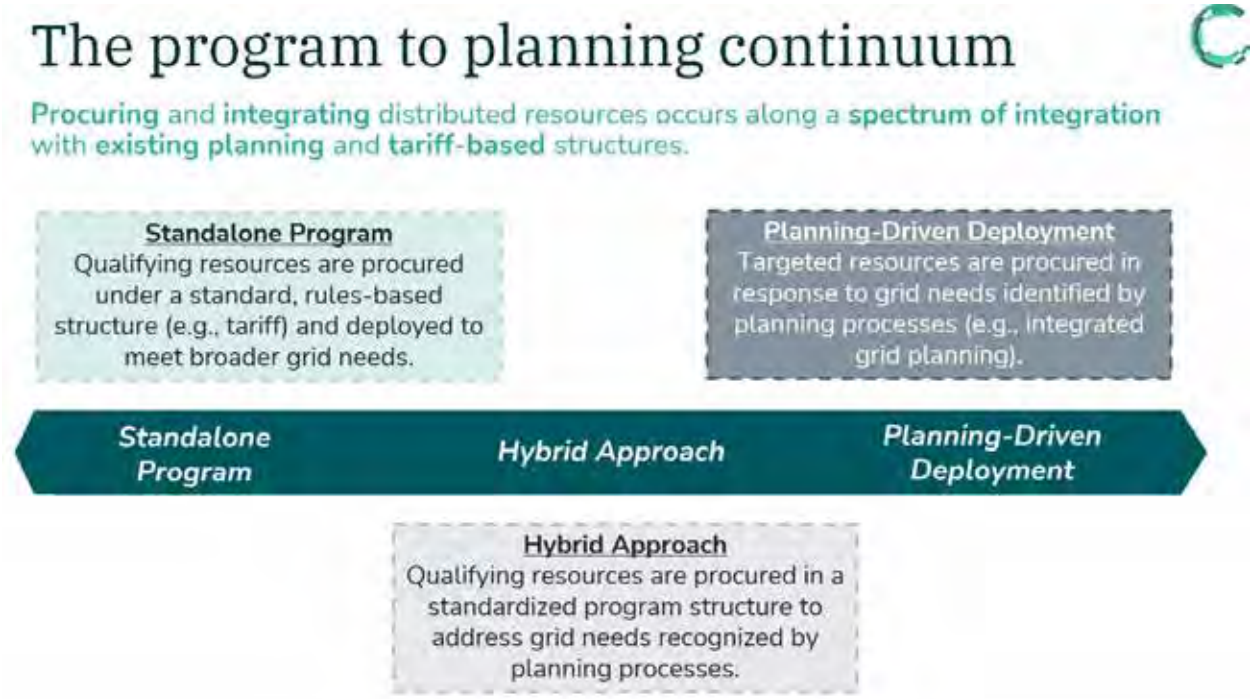
The regulators backgrounds vary considerably. Some have strong grid industry background, and some have almost none – and everything in between.

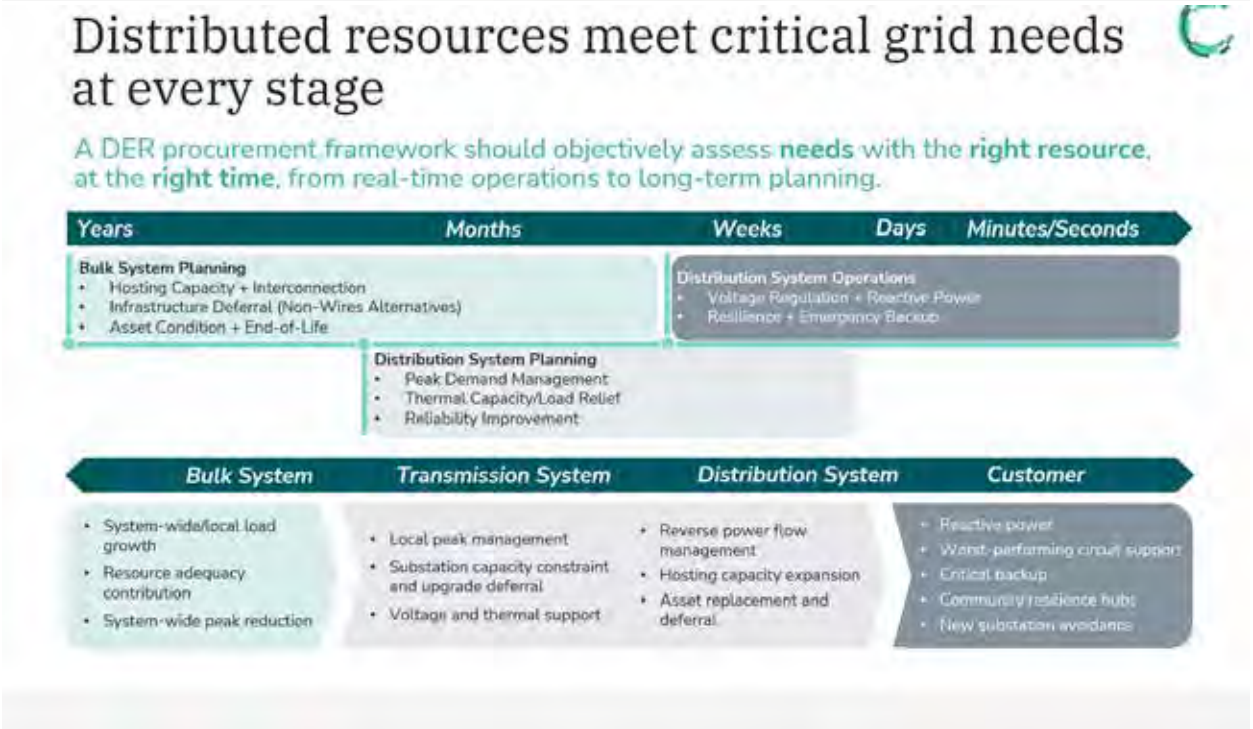
Ken Wacksd said some political appointees had little background; he observed this when he was working with regulators in the past.


The Opportunity
Capturing the full potential of DERs requires mechanisms to ensure customers have full confidence in their DER investments, guarantee that DERs are not sidelined in providing grid services, and safeguard that planning informs and drives DER deployment.
Customers must be empowered to take control of their energy bills and directly participate in the energy system.
DERs cannot be shut out from providing grid services and must be able to compete with traditional resources on equal footing.
Planning processes must inform and direct DER deployment to meet grid and power supply needs.
A comprehensive procurement framework establishes mechanisms and clearly partitions roles to provide a structured alternative to conventional utility-owned, capital-intensive solutions.

Meeting Minutes

Aug. 19, 2026





Matt McDonnell replied to a question by Marc Costa saying that human nature lends itself toward more reactive change than proactive change. He personally sees that a multi-prong approach is needed for transformation.

He said the next year or two will bring about more discussions. He is concerned about the impact of wildfire seasons, and he added that extreme weather events will continue to impact the grid.

He said that with the energy storage industry, the first policy wave was a lot of mandates on procurement.

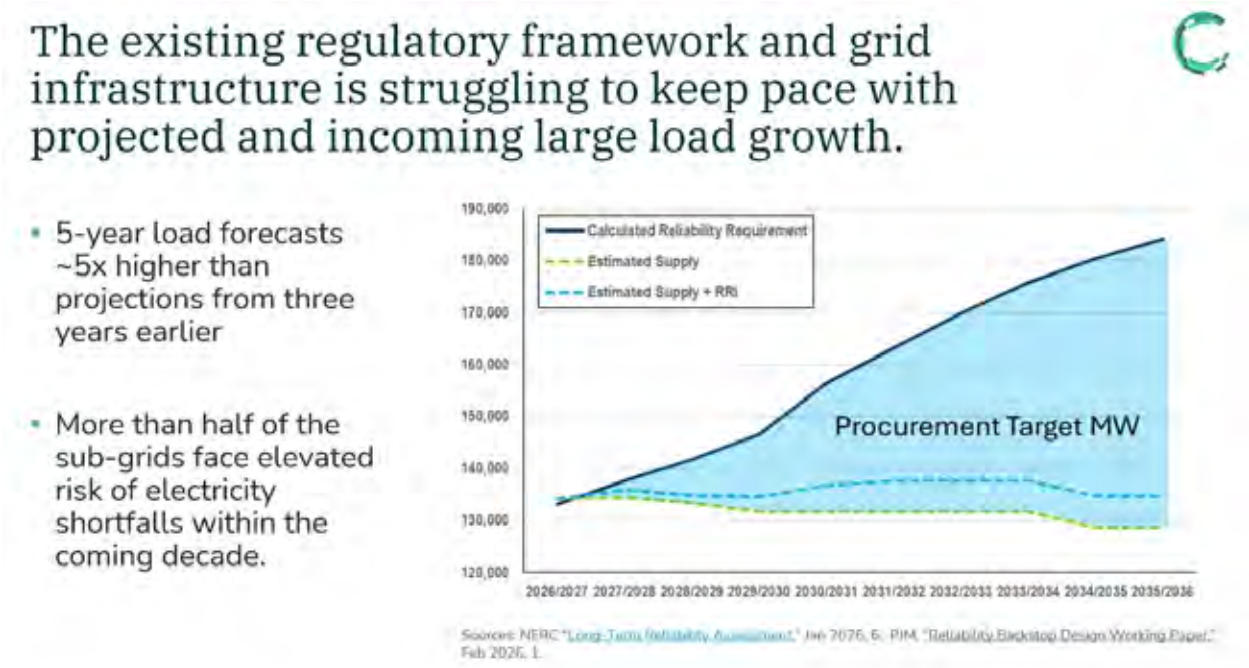
Ken Wacks asked if crisis will always be driven by fear.

Matt said that is his fear. He said crisis can be a catalyst for action.

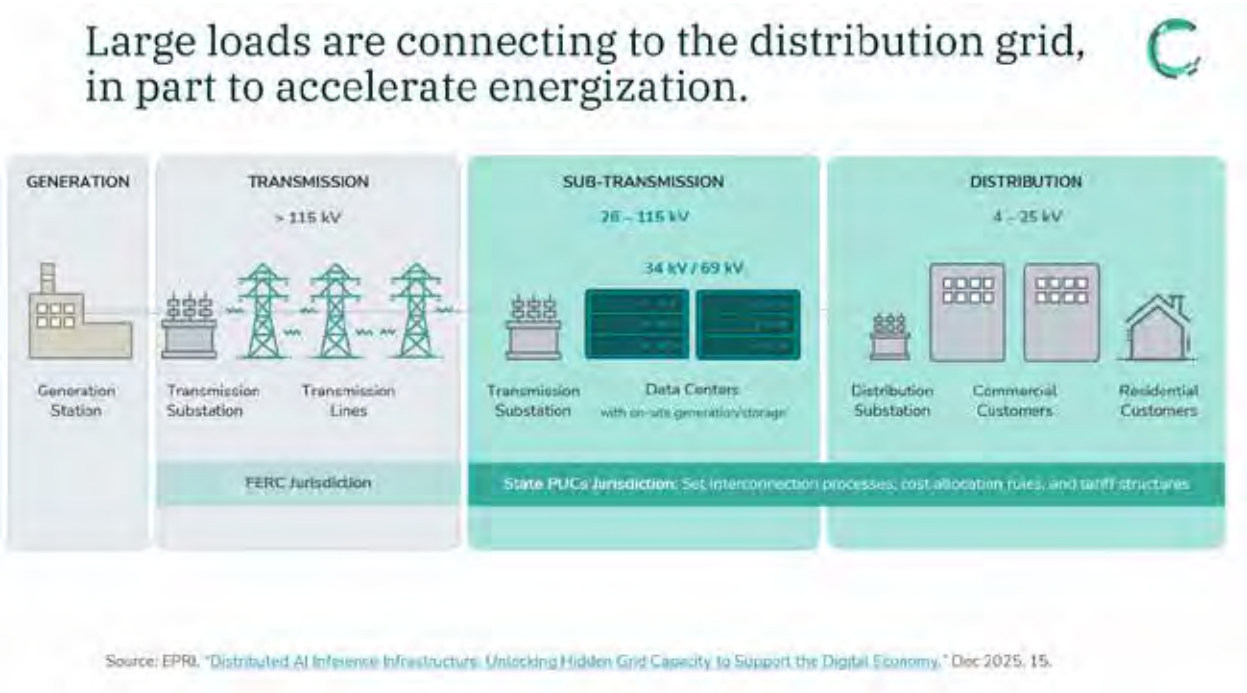
He said if we reflect on how past moments of significant changes, the changes are made less frequently because of thoughtful planning and more often because of flash points.

Ron Ambrosio also commented was Mark Paterson's original inspiration. He said it's better to prepare for the future than to react to it.

Matt gave comments on regional interest, state clean energy goals, region by region differences. He noted that progress is often slow.



Increasing interest in distribution centers data centers.



Matt noted that more work needs to be done and awareness needs to be raised on the part of Regulators.

He said that he does see new products emerging. They are embedding distributed compute at the residential level. Home solar plus storage, distributed compute at the home premise, optimizing from a distributed approach and customer level service.

He said that he is not sure how all of this will move forward.

Chat comments regarding the guest presentation are on the last page of the minutes.

Meeting Minutes

Aug. 19, 2026

Larisa Dobriansky 11:23 AM

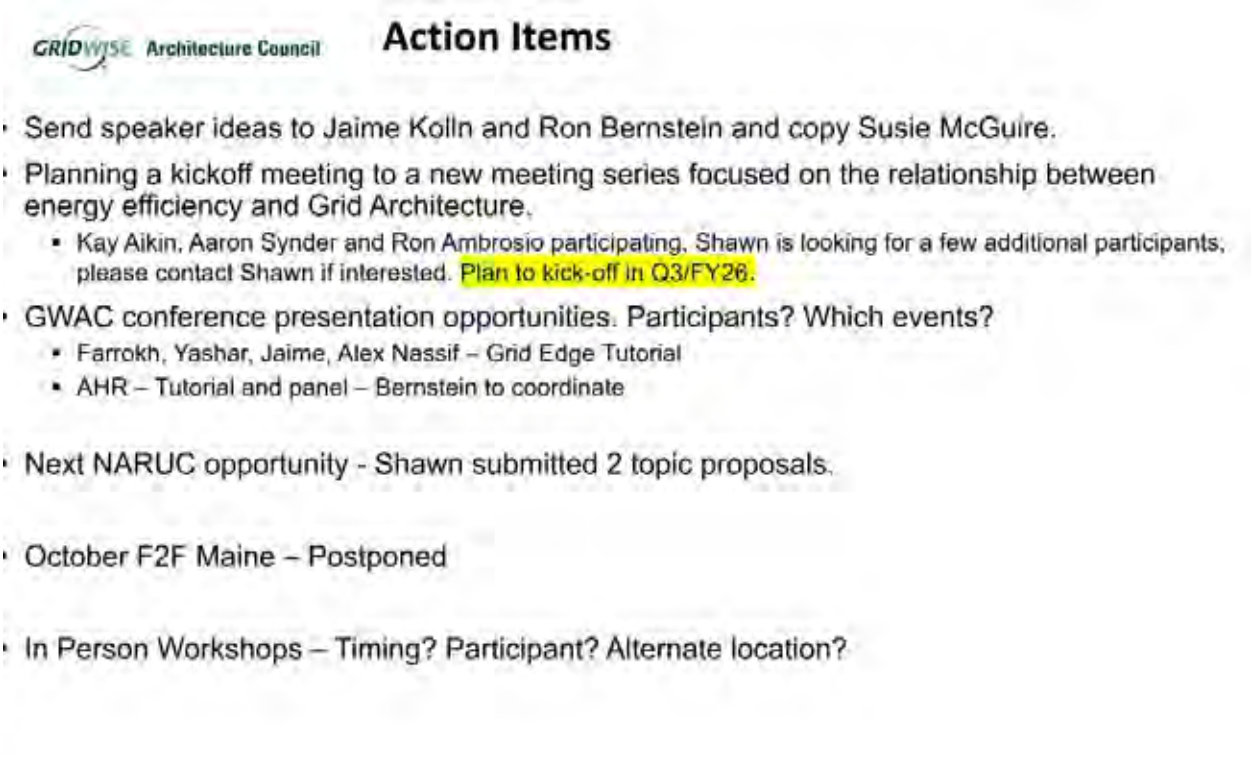
LD Dobriansky: Comment. Too much emphasis on VPPs. Regulatory discussions should also include the competitive advantages of microgrids that provide superior energy management (energy efficiencies including generation, storage with energy efficiency solutions.)

Overview of Self-Supply Framework Characteristics

	LEVEL 1 | Flexible Load	LEVEL 2 | Shared Asset	LEVEL 3 | Economic Connection
Power Flow	Import only	Bidirectional	Bidirectional
Connection Type	Load interconnection only	Load + exporting generator interconnection (where applicable)	Islanding-capable: Load + exporting generator interconnection
Grid Services	Load modification	Load modification + export	Load modification + energy export + grid-forming services
Import + Export	Firm import sized to net peak load (gross peak load less committed load reductions); Non-firm import available for partial load requirements	Firm import sized to pre-defined portion of customer's load; Non-firm for the remaining load balance	Non-firm for economic value; Firm import available for duplicative reliability reinforcement
	N/A	Firm export, non-firm export, or both available; tariff design choice	



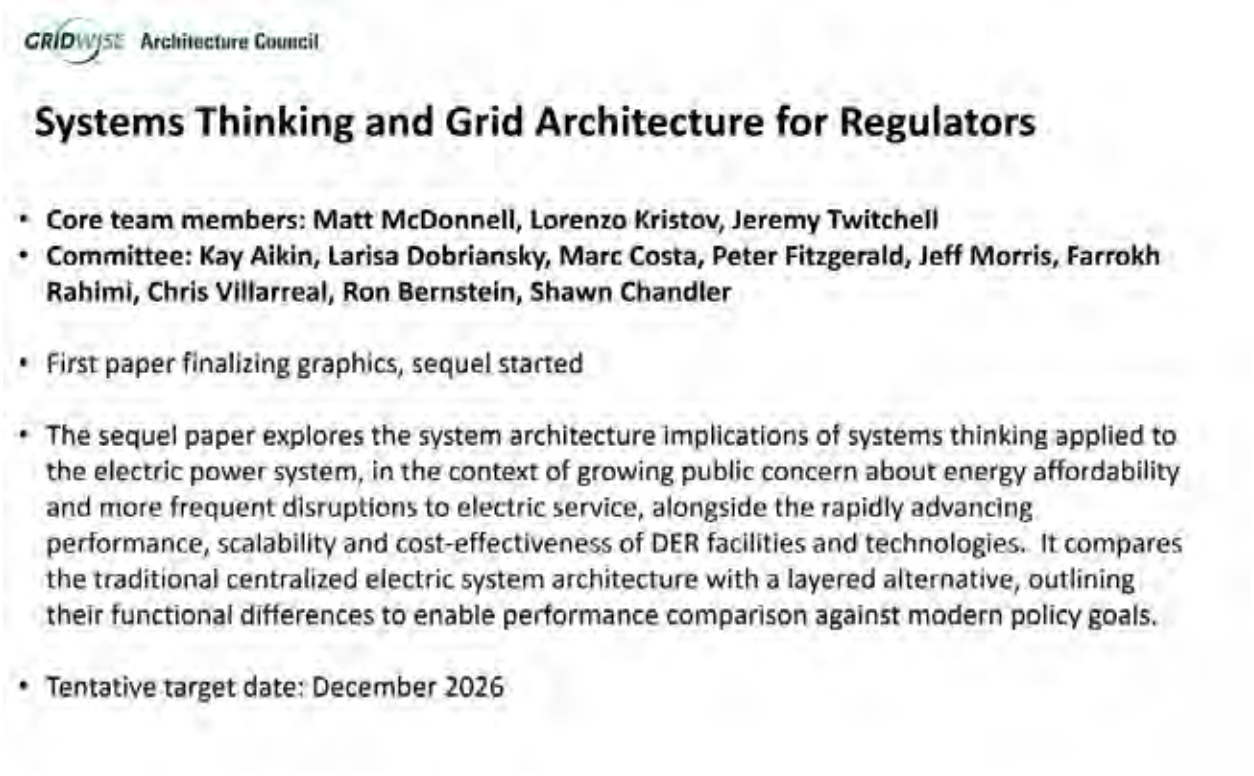
Matt said he read the Grid Services paper from PNNL, and he is hoping to present more effectively to regulatory audiences.



Jaime mentioned that the yellow highlight above represents an planned event by Vice Chair Shawn Chandler, who has submitted a proposal for GWAC to present at an upcoming NARUC meeting. So far Shawn, Yashar, Jaime and Farrokh are planning to attend if it is accepted. More presenters are welcome to join.

Jaime reminded GWAC that the Maine F2F meeting that Kay was hosting has been cancelled for now. We are hoping to revive it for a spring F2F meeting.

In person workshops are on hold but if someone has ideas, please get back to Jaime. But we will move forward with virtual workshops.



Matt – there is talk about a follow on paper. Lorenzo is involved. The group is still meeting but taking a bit of a break.

GRIDWISE Architecture Council

Grid Architecture Concept Model for Transportation Electrification

Analyze various visions of the electrification of fossil fuel-based systems and identify areas where GWAC concepts could provide architectural value to bridge and coordinate between customer and grid objectives. Electrification will introduce dependencies such as those seen in the transportation sector due to electrification. Grid Architecture will be used to describe the touchpoints (for example through sector coupling) that will require collaboration. GMLC reference cases will be included. This activity has been underway since Q4/24 and is on target to be completed FY26.

- 15-20 page whitepaper
- Committee: Ron Cunningham, Shawn Chandler, Farrokh Rahimi, Mark Ortiz, David Forfia, Aaron Snyder, Lorenzo Kristov, Bhaskar Mitra
- 1:00 PM PT/ 4:00 PM ET, 2nd and 4th Tuesday of the month
- Final deliverable date of July 30, 2026

Trying to follow up on some things and finalize.

Jaime will get PNNL help for them, let him know if that is happening.

Meeting Minutes

Aug. 19, 2026

GRIDWISE Architecture Council

New Topics for Future Work Products.

From Regulation to Coordination: Governing the Distributed Grid

In the New Energy Landscape, the central governance challenge is no longer simply how to regulate individual actors, technologies, or markets, but how to establish the decision rights, obligations, and accountability structures needed for operational coordination across a distributed and decentralized grid. Without this governance layer, even technically sound coordination architectures may fail to scale because economic signals, physical constraints, cybersecurity responsibilities, and customer autonomy will remain misaligned.

- Team: Kay, Marc Costa,
- Deliverable date: Spring 2027

Operational Coordination

Draft… This paper will explore how applying Grid Architecture concepts such as layered decomposition and coordination nodes supports interoperability, flexibility, and varying objectives to delivers greater scalability and resilience. Relevant scenarios will be discussed helping walk through key coordination elements.

- Team: Mark Ortiz, Yashar, Jaime
- Deliverable date: Summer 2027



Dave Wollman – The new director has come in, and he would like NIST to be more involved with industry and ideally getting money from industry to support activities. Some of the staff are taken aback by this. It is a dramatic change.

There is progress in AI and cybersecurity research. There is a new AI accelerator.

Dave noted that his former priorities are no longer the correct ones. Several are not on now from the list.

Ken Wacks said the ISO/IEC is planning a semiannual, Group One, Home Electronic Standards meeting that starts Nov. 9, 2026, in Homburg Germany. There are new proposals on topics like AI data models for homes and apartments; Agentic life; Energy Management Agents for smart appliances and more.

Ken said the group has a lot of new proposals coming in, centering around topics such as an AI data model for homes and apartment complexes. They have a protocol of energy management agents for smart appliances, software defined energy management, agent architecture, and something the proposer calls energy orchestration.

So of course, as we get more details on that, I'll be reporting back to the GWAC.

Meeting Minutes

Aug. 19, 2026

Ken Wacks: For the Consumer Technology Association, CTA, we're working on the third generation of the modular community with interface standards for energy management to be known as ANSI/CTA - 2O45-C. This is the third version.

Ken Wacks: Customer Grid Edge is still on hiatus, and we're discussing support from new sponsors. Ken will update the GWAC on this as it progresses.

Ron Ambrosio said he had no updates on SEPA activities.

Ron Cunningham is working with Nancy Lema on bi-directional power flows for EVs. He is giving them some guidance on the documentation that they are creating.

Ron Bernstein discussed the ASHRAE event featuring GWAC speakers at the AHR in Chicago. There are two other topics that he is finding speakers for as part of the ASHRAE meeting. These talks will be listed with GWAC participants as host but so far, he is the only one signed on. He is hoping to find someone else interested in helping to present these talks which have been accepted. If anyone is interested, please contact Ron for more information. This event will be January 25 – 27, 2027 in Chicago.

Session Title:	Training – Designing and Implementing Enterprise Control Systems
In 5 words or less, what is this seminar about?	Enterprise System Design Training
Description for Attendees:	This training will present the ASHRAE Guideline 13 Specifying Building Automation Systems approach to enterprise systems. We will discuss the design and implementation of OT and IT elements, network architecture options, roles and responsibilities, and how to get the best out of your design team. Several key topics including interoperability using metadata standards, the importance of enforcing owner project requirements (OPRs), standard points lists, managing alarming, work order system integration, and an overview of network segmentation, cybersecurity, and connecting BMS applications to enterprise applications.

Ron Ambrosio noted an IEEE activity that he has been working on for the last six to nine months, the cybersecurity trust framework. This was developed in the medical devices space but from the beginning was intended to become more generalized across other domains. The medical one has been published.

It is called TIPS for trust, identity, privacy, protection, safety and security.

As of the last month or so it's gotten accepted in IEEE PES as a new working group to develop a version of TIPS for the energy space. Ron said it is number P 29 30.3 and he is part of the leadership team on that. He anticipates a future presentation to GWAC about it to be presented either by him or by another member of the work group.

Ken Wacks mentioned that the ISO international group is working on something fairly similar. He said Ron Ambrosio is invited to join that group if he is interested.

Jaime Kolln is planning to give a presentation at the upcoming GridFWD meeting in Utah.

Ron Bernstein reminded the group that he will not be able to attend the September meeting.

GRIDWISE Architecture Council

Upcoming GWAC Meetings

Date	Topic or Speaker	Format
August 19th, 2026	NARUC recap	
September 16, 2026	Speaker TBD	
October 19-22, 2026	Online. Bruce Nordman possible speaker	
Nov. 17, 2026	RE+ Las Vegas – GWAC tutorial	

Jaime noted that a September speaker is still needed.

Chair Ron Bernstein thanked Matt McDonnell for the presentation today.

Matt asked the today's presentation not be posted on the GWAC website.

Chair Bernstein adjourned the meeting.



Meeting Minutes

Aug. 19, 2026

Chat Comments below from the guest speaker session:

Meeting Minutes

Aug. 19, 2026

Larisa Dobriansky 11:09 AM

LD Dobriansky: Not sure I was unmuted. You could not hear me? Two observations: Many jurisdictions are using "NWAs definitions that really blur NWA solutions with Grid Services; and 2nd, Utilities are oftentimes opposing standardization of consistent, systematic and coherent DER accounting and try to apply C/B Analysis on a programmatic ad hoc basis that undermines comparisons of resource solutions and alternative scenario evaluations.

Kolin, Jaime T 11:09 AM



> Larisa Dobriansky 6/19/2026 11:09 AM
> Dobriansky: Not sure I was unmuted. You could not hear me? Two observations: Many jurisdictions are using...

it showed you unmuted but couldn't hear you.

Larisa Dobriansky 11:11 AM

LD Dobriansky: I am unmuted on my computer. See my observations and what are your reactions Matt.

Aaron Snyder 11:12 AM

AS

> Larisa Dobriansky 6/19/2026 11:09 AM
> Dobriansky: Not sure I was unmuted. You could not hear me? Two observations: Many jurisdictions are using...

i attended this webinar yesterday that partially addresses your second point - maybe this will become a more adopted approach that minimizes ad hoc approaches:
NASEO NESP OpenBCA Overview Webinar: NASEO is pleased to announce the release of OpenBCA, an open-source benefit-cost analysis tool. OpenBCA is a free desktop application that provides a transparent framework for evaluating the benefits and costs of grid edge resource investments. Designed to align with NASEO's National Standard Practice Manual (NSPM), OpenBCA allows jurisdictions to conduct cost-effectiveness analyses of DER investments and strategies using their unique jurisdiction-specific tests (JSTs), along with any secondary tests.

V

Meeting Minutes

Aug. 19, 2026

Marc Costa 11:14 AM

MC my 2 cents is that regulations are more commonly used to manage a complex process of oversight, rather than regulation being used to create an environment that facilitates change. Now regulation is protecting the status quo. We all know that but its worth explicitly recognizing this and what the intent of regulation is in the first place

Larisa Dobriansky 11:14 AM

LD Dobrianky: Yes, Aaron, I have been working with the NESP/E4theFuture/NASEO and support/advance what they are doing in the jurisdictions in which I practice. But developing the "Framework" is the most important, not just tool aids. Their lates tool aid is quite good and an excellent companion that they provide to implement jurisdictional frameworks.

Bernstein, Ron (RB-CG) 11:44 AM

RB

Cybersecurity Introduction and Best Practices for Building Automation Systems
Cybersecurity Training for BAS
b. This training class will teach basic cybersecurity concepts, best practices, and implementation tricks and tips. The class will cover both physical BAS security and network/virtual security. Participants will learn the current terminology, intrusion methods, hardening best practices, risk management, and response readiness. Sponsored by GWAC/ASHRAE G13/ASHRAE CYB.MTG.