

Meeting Minutes

May 15, 2025

F2F Richland – Day 2

GWAC Members

Ron Bernstein, GWAC Chair and President,
RBCG, LLC

Kay Aikin, Founder, CPO, Dynamic
Grid/Introspective Systems

Ron Ambrosio, Independent Energy
Transformation Professional

Andy Bordine

Shawn Chandler, Director, Guidehouse

Marc Costa, Sr. Director & Chief Architect,
Power & Grid, Schneider Electric

David Forfia

Yashar Kenarangui, Xcel Energy

Aaron Snyder, Dir. of Grid Technology
Consulting, EnerNex

Leonard Tillman, Partner, Balch & Bingham, LLP

GWAC Friends

Aaron Smallwood, SEPA

Peter Fitzgerald, INS Eng.

Chris Irwin, DOE OE

Alaa Mahjoub, Independent Digital Business
Advisor

Harry Peterson, Siloxit

PNNL Support

Jaime Kolln, PNNL GWAC Administrator

Susie McGuire, GWAC Coordinator

Grace Borland, GWAC Financial Coordinator

29 attendees

GWAC Associates & Emeritus

Ron Cunningham, GWAC Emeritus

Doug Houseman, GWAC Emeritus

Mark Knight, GWAC Emeritus

Lorenzo Kristov, Emeritus

GWAC Guest Speaker

Paul DeMartini (Day 1)

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Conferences and Events

Date	Event	Location	Attend	Speaker	Topic
May 6-8	V2G Energy and Policy Forum	San Ramon, CA	Jaime Kolln		
June 21-25, 2025	ASHRAE Summer meeting	Phoenix, AZ	Ron Bernstein	Ron Bernstein	Spec dev buildings & buildings to grid
July 17 – 20, 2025	NARUC Summer July 27 – 30, Boston, MA	Boston, MA	Kay Aikin		Shape the Future of Utility Regulation
July 27 – 31, 2025	IEEE PES General Meeting	Austin, TX	Farrokh Rahimi, Jaime Kolln, Lorenzo Kristov, Kay Aikin		
Sept. 8-11, 2025	RE+	Las Vegas, NV	Jaime Kolln		GWAC Tutorial on Monday, Sept. 8
Oct. 22-24, 2025	ASHRAE Building Decarbonization Conference	Chicago, IL			
Oct. 26-28, 2025	N. American Power Symposium	Hartford, CT	Jeff Katz		

Andy Bordine will be speaking at the UTC 2025 Telecom & Technology Conference June 16 – 19, 2025 in Long Beach, CA.

Aaron Smallwood encouraged everyone to look at the SEPA events page for several new entries by SEPA.

Ron Bernstein mentioned the DOE Energy Exchange summer workshops which will be virtual:
<https://www.energy.gov/femp/energy-exchange>

Ron B. also asked if we could have a DEMO of the new website at an upcoming GWAC meeting.

Action: Schedule PNNL Web Content Systems for a demo at a future meeting

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Agenda

Call to Order and Roll Call

- Welcome

GWAC Administrative Business

- Minutes
- Upcoming events
- GWAC Accomplishments
- Action Items

Future Activities

- GWAC Strategic Outreach Plan
- Planning 2025 GWAC Tutorials

Work Product Status Reports

- Working Party Status Update
 - Grid Future State White Paper
 - Grid Arch for Regulators White Paper
 - Applying Grid Architecture Concepts to Bridge Back from the Future Grid
 - Grid Architecture Concept Model for Transportation Electrification
- Liaison Reports

New Business

Jaime has a future speaker in mind who will discuss a microgrid demonstration project at the University of St. Thomas located in St. Paul, Minnesota.

Ron Bernstein has arranged for the June speaker, Peter Kelly-Detwiler, an energy expert and strategic consultant.

The group discussed summer GWAC meeting dates. June will be June 18, and July will be July 16.

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Action Items

- Send speaker ideas to Jaime Kolln and Ron Bernstein and copy Susie McGuire.
 - Added an “About the Council” slide to template
 - Slide deck templates are available to GWAC members.
- Liaisons
 - GWAC is looking for a liaison to the GridWise Alliance to foster better interactions between the two groups
- Website updates
 - Continue to add video presentations including speakers to GWAC database bureau post on the website.
 - Feedback requested on format, etc.
 - GWAC and Emeritus GWAC to review their bios from the website and update if needed.



GWAC Strategic Outreach Plan

- Events
 - RE+ Las Vegas
 - Other presentation?
- Guest speaker recordings continue to be developed and published to YouTube
- Outreach through conference presentations
 - Slide deck developed with template and GWAC outreach slides.
 - Share the deck for “Building Back from the Future”.
 - NARUC meeting colocation?
- Other organizations to “cross-pollinate” ideas with.
 - Identify liaison volunteers, e.g. INCOSE

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Kay Aikin suggested operational AI or analytic AI as a future topic. Aaron Snyder and Ron B. also each said they had an angle they could speak to on AI.

Other possible topics include task force on TVA and public utilities, and discussions around the energy needs of data centers. Those wanting to contribute are Jaime Kolln, Aaron Snyder, Ron Bernstein and Kay Aikin.

Shawn Chandler suggested load flex and load management and flexibility – there are a lot of organizations focused on that. The current trending DOE policy to move out of the energy efficiency area concerns a lot of grid industry stakeholders. Shawn mentioned a group called the North American Gas Heat pump collaborative. Jaime will send Shawn some information. Ron Bernstein and Shawn Chandler plan to talk more offline.

Harry Peterson suggested condition monitoring as a consequence of not having a forever battery.

He also said that terabytes of data are expensive and suggested that GWAC strategically follow it.

Ron B. asked Harry to send the name and contact information of a speaker that he suggested to him, Jaime Kolln and Susie McGuire.

Farrokh Rahimi mentioned the IEEE - PES General Meeting scheduled in Austin this July. Farrokh will be there and will give a talk. Jaime asked him for this topic/talk title.

Ron Ambrosio noted that last month he gave a talk to a regional group in Florida on back to the future and he included an overview of the GWAC.

Aaron and Kay are both currently teaching at Universities.

Chris is currently coaching a U-14 girls soccer team.

Yashar has a colleague who teaches in Smart Grid.

Aaron mentioned a smart grid book published by Wiley. Ron Ambrosio asked about it. Ron had written a chapter in an earlier version.

Jaime mentioned the current GWAC work products; Grid Architecture Back from the Future, Transactive Concept Model, and Grid Architecture for Regulators are our current work products. Aaron said none of those are off limits for discussion at RE+. It is such a large conference, and attendees represent a wide variety of perspectives. He said architecting flexible grids are a prevalent theme right now. One example is AI and how it does VPP and how Derms play into it. We need to figure out how to put it together so that policy makers and regulators understand it.

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Jaime said the first two are higher level. He said that our bridging back topic may be very relevant. ADMS DERMS, Energy Hub, Energy DERMS, and related architecture are of interest.

Ron Ambrosio has 15 minutes for his speaking slot.

Kay Aikin has 30 minutes.

Storage integration concepts and integration could be one topic.

Kay would like to see Lorenzo and Marc Costa involved.

There will be a lot of developers at RE+ who are trying to get projects built. There are constraints on the infrastructure; some developers will do OK with it and some won't. Jaime stressed that the selected topics must relate well to key GWAC interests.

Operational coordination was suggested as another ecosystem topic. Jaime cautioned that with solar and storage integration we may be getting into the weeds, but maybe if we look at stakeholders and procurement that would fit the GWAC interests.

Kay restated her suggestion to be, "How utilities look at connections to get mx DER in the system."

Aaron commented that RE+ is primarily a developers conference.

GRIDWISE Architecture Council

Agenda

RE+ Tutorial Discussion, Monday September 8th (Distribution focus)

- Topics
 - Bridging back context setting – Intro content and/or refresh - Ambrosio? What is GWAC!
 - GA – Change with consideration of near term and long term goals, crossing the chasm – Kay
 - Architecting flexible Grids (Maybe under coordination)
 - Solar and Storage integration concepts – Jaime
 - Interconnection, studies, and mechanisms to reduce challenges to it
 - Studies, Aggregate studies, Automated studies
 - Flexible interconnection
 - Dynamic operating envelope
 - Power system policies related to DER - Lorenzo, Marc
 - Aggregate studies for compliance,
- Transportation electrification – concept model related – Chandler
- Built environment, microgrids, load flex, BMS, ESI, interoperability – Ron B
- AI – energy impacts - Ron B
 - VPPs to Power Data Center Loads
- ADMS/DERMS – Operational Coordination - Farrokh
 - Managing DERs without an aggregator

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Ron Bernstein suggested that we have some breakout sessions soon on two or three topics.

Aaron said it is a good start.

Jaime said that the webinar slide deck is done and it's in the work products on Teams and Ron A. said it is ready for GWAC users.

Jaime said we will need to enter the publication in PNNL Information Release. Jaime was not on the committee for it and is not considered a co-author. But all past GWAC publications have gone through this process.

Ron B. said he will be attending DistribuTech and asked who else will attend. It will be held in San Diego. Farrokh said he will be there. There could be others from GWAC who will attend. Ron said it could be a good opportunity to host a GWAC F2F at Casa Bernstein.

Aaron Smallwood said that the RE+ in September should be a great turnout. He noted that RE+ is an international organization with several international field offices.

They PUF Public Utilities Fortnightly was purchased by SEPA and is being integrated into SEPA. They are geared toward policy makers and regulators.

There will be some changes to the working group.

EV charging something using 2030.

Ron Ambrosio asked Aaron Smallwood about the SEPA Research Advisory Council (RAC). The council provides insight into industry changes and developments as well as guidance on research priorities. Ron A. and David Forfia are both members of the RAC.

Shawn Chandler expressed concern about the Energy Star labeling program going away.

Aaron and Kay said manufacturers could create their own similar certification/sticker program.

Shawn said it has been a long-standing program, and many groups are intertwined with it and the DOE including several trade organizations and manufacturers. He suggested that GWAC consider creating a work group around the issue in the Grid Architecture/standards space.

Ron Cunningham asked if it fits into the Council mission and purpose. The architecture of it seems a little too specific. Implementations of technology and their characteristics hasn't generally been the purview of the GWAC.

Ron A. said GWAC looks at more broadly at energy efficiency and if we can continue to transform the grid and move away from carbon-based energy sources.

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Jaime said if the GWAC wants to do something in the energy star space it is their decision. It will be interesting to see how industry promotes this challenge.

Kay sees it as *adjacent* to GWAC interests.

Shawn said he is happy to lead the discussion. If you are interested let Jaime, Susie know who would like to be involved. Kay, Aaron, Ron A, Shawn so far. Aaron said what are the architectural implications of energy efficiency.

Action: Shawn to host a meeting on the implications of the future of the Energy Star program. Kay Aikin, Aaron Synder and Ron Ambrosio are interested in participating.

David Forfia said if we say energy efficiency and don't specifically call out the names of particular programs that might be a way to handle it. He asked how we would get specifications and measurements of AC appliances, HVAC units, buildings, and buildings controls devices.

Kay said that on June 18 she and Marc Costa and will be attending a UN meeting in Ireland.

June 11 was proposed as a possible alternative date for the June meeting

For July the GWAC regular scheduled meeting will be July 16, but July 23 was suggested as an alternative. Jaime would like to do a poll to see what is preferred. Ron A. said either works for him.

Action: Susie to send out a poll or whatever to see which dates will work best for the GWAC. (done)

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David Forfia gave a motion to adjourn the meeting, and Aaron Snyder seconded the motion.



Adjourn

Next GWAC Meeting: Wed. June 18, 2025



<https://gridwiseac.org/>

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Chat:

Mark Knight (External) 5/15 11:00 AM



from ChatGPT: The **GridWise Architecture Council (GWAC)** remains **relevant**, particularly in the context of long-term grid modernization, smart grid evolution, and interoperability. However, its influence is more **strategic and conceptual** than operational or regulatory.

5/15 11:09 AM Meeting ended: 3h 39m 18s

Andy Bordine's UTC link:

[UTC 2025 Telecom & Technology Conference | Long Beach, CA](#)

David Forfia link:

[Virginia narrowly avoided power cuts when 60 data centers dropped off the grid at once - DCD](#)

Aaron Snyder (External) 5/15 9:08 AM



the memphis issue, what comes first - the load or the permits: <https://www.politico.com/news/2025/05/06/elon-musk-xai-memphis-gas-turbines-air-pollution-permits-00317582>

'How come I can't breathe?': Musk's data comp...

The company's turbines — enough to power 280,000 homes — run without emission controls in an area that...

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<https://www.politico.com/news/2025/05/06/elon-musk-xai-memphis-gas-turbines-air-pollution-permits-00317582>