

## Meeting Minutes

Nov. 16, 2022

### **GWAC Members**

Ron Bernstein, GWAC Chair and President  
RBCG, LLC

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

Ron Ambrosio, Independent Energy  
Transformation Professional

Ron Cunningham, IT Enterprise Architect,  
American Electric Power

Paul DeMartini, Managing Partner, Newport  
Consulting

David Forfia, Principal Consultant, Utilicast

Lorenzo Kristov, Principal, Electric System  
Policy, Structure, Market Design

Ahlmahz Negash, Sr. Power Analyst, Tacoma  
Power

Farrokh Rahimi, Senior Vice President, Open  
Access Technology International, Inc

Aaron Snyder, Dir. of Grid Tech. Consulting,  
EnerNex

Leonard Tillman, Partner, Balch & Bingham, LLP

### **GWAC Associates & Emeritus**

Rahul Bahadur, VMWare, Inc.

Marc Costa, the Energy Coalition

Ken Wacks, Home, Building & Utility Systems

Mark Knight, 1898 & Company

Tim Schoechle, CSU

David Wollman, NIST

### **GWAC Friends**

Bob Bass

Toby Considine

Sean Crimmins, EPRI

Larisa Dobriansky

Anthony James

Jaime Kolln, PNNL

James Orenstein

### **GWAC Members and Assoc. not present**

Andrew Bordine, VP Energy Mkts & Innovation,  
Anterix

Jeff Morris, Schneider Electric

Mark Paterson, Managing Director, Lead  
Systems Architect, Strategen

### **PNNL Support**

Susan McGuire, GWAC Coordinator

Ron Melton, Acting PNNL Administrator

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Ron Bernstein called the meeting to order at 10:07 am Pacific with a quorum.

Since meeting minutes for September and October were sent out just ahead of the meeting approval of past meeting minutes for Sept. and Oct. was postponed until next month. Ken Wacks requested that future meeting minutes have a reduced file size.

Ron Melton reported that GWAC member Gerald Gray has requested to transfer to Emeritus status. All other GWAC members have requested to continue on. All interested applicants should plan to turn in their applications by mid-December. The committee is planning to meet in January.

**Action: GWAC candidates are submit applications by mid-December.**

Ron Cunningham and Ron Ambrosio have volunteered to be on the new member selection committee.

### Conferences and Events

Date	Event	Location	Attend	Speak	Topic
Dec 5 – 6, 2022	Grid CONNEXT	Washington DC	Kay Aikin	?	GridWise
Jan 5 – 8, 2023	Consumer Technology Assoc.-CES 2023	Las Vegas, NV			Global Stage for Innovation
Jan 16 -19, 2023	IEEE ISGT	Washington, DC		Yes	Moving to a Self Driving Grid
Feb 4 - 8, 2023	ASHRAE (Co-sponsor with IEEE) / AHR Expo	Atlanta, GA	Ron Bernstein, Farrokh Rahimi (tent)	Yes	Standardized Building Datasets for Benchmarking Control Algorithms, Energy Efficiency, Modeling, and Decarbonization, Possible GWAC F2F
Feb 6 – 8, 2023	AHR Expo	Atlanta, GA	GWAC	Y	Panel Presentation and F2F GWAC meeting
Feb 7 – 9, 2023	DistribuTECH	San Diego, CA			
Apr 10 -13, 2023	IEEE Grid Edge Technologies Conference	San Diego, CA	Jaime Kolln	?	Grid Interoperability
Jul 16 – 20, 2023	IEEE PES General Meeting	Orlando, FL			Meeting the Energy Needs of a Dynamic World

Kay Aikin is no longer planning to attend Grid CONNEXT.

Ron Melton mentioned that he recently met the new GridWise Alliance staff, and they are interested in renewing the relationship between GWAC and GridWise Alliance.

Ken Wacks will be attending the Consumer Technology Association meeting in January.

Farrokh Rahimi, Seemita Pal and Ron Melton will be at the IEEE ISGT meeting in January.

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Ron B. noted that the dataset talk that he and Farrokh submitted to ASHRAE was just accepted. Ron B. said it's a morning session of 1.5 hours.

Farrokh said that he and David Forfia are both registered to attend DistribuTECH. This overlaps with the AHR Expo so they won't be able to attend the GWAC F2F in February.

Paul DeMartini noted that he will also miss the GWAC F2F in February; he will be at Energy Futures in Australia at that time.

Ron Bernstein said that there will be a presentation at the AHR Expo by GWAC, "Working Back from the Future," as an educational event of the AHR, Tuesday, Feb. 7 from 4:00pm to 6:00pm Eastern Time.

Following the panel on Wednesday, Feb. 8 from 8:00am to 5:00pm Eastern Time there will be a GWAC Face to Face meeting and the theme is "the Next Big Thing."

Ron M. said that the IEEE Grid Edge meeting alternates years with the T&D Expo. This year Grid Edge will be held in April in San Diego, California. Ron B. will be a speaker and Ken Wacks is a panelist. Jaime is leading a panel session. Seemita Pal confirmed that Jaime submitted two sessions, and both were accepted.

### **Actions Review**

A new GWAC Blog post by Rahul Bahadur was posted yesterday on the GWAC website. Rahul Bahadur said that in it he reviews three Northern California CCAs and highlights their efforts for integrated resource planning and current achievements. Rahul plans to keep it updated over time.

Ron M. asked about SEPA Blockchain work. It's not a working group but there may be some work in some of the groups. David will look into it.

Ron Ambrosio said that SEPA blockchain would come up in the TE working group – Ron A. said nothing specific is being done in that area at this time.

Larisa Dobriansky said blockchain is being discussed in SEPA TE both with regulators and in field project work; a briefing was recently held. Claudio Lima feels that IEEE should address blockchain standards. Ron M. said we could ask him to talk with GWAC about this standard. She said he reviewed recent developments and they have been addressing it.

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GWAC Projects						
Project	Grid Arch for Regulators	Grid Architecture White Paper	TESC 2022 Conference	Grid Future States	GWAC Blog Content and Review Committee	THE NEXT BIG THING
Scope	Applying Grid Architecture in the Policy & Regulatory arenas	An introduction to Grid Architecture -- including best practices and real-world examples	Annual GWAC sponsored conference focused on Transactive Energy and related topics	Update Grid 3.0 Future States	Decarbonization, GA for Policy	Council's primary focus for the next year -- results of F2F meeting.
Audience	Policy Makers	Geared to stakeholders who aren't familiar with grid architecture	Decision makers, solution providers, labs, academics, policy, solution providers	Industry Stakeholders	Industry stakeholders, public facing website	Council, Friends, All Stakeholders
Status	Case studies	Collected inputs and comments from working party members	Complete	First full initial draft is complete	4 blogs released, 3 in queue	Concept phase
Actions	Group: Lorenzo Kristov, Larisa Dobriansky, Kay Aikin, Farrokh Rahimi, Chris Villarreal, Mark Paterson	Finalize draft, polish graphics	Conference Closeout (final accounting, reporting in process RB)	Target: EOY 22 for a candidate draft	Group: Kay Aikin, Ahlmahz Negash, Larisa Dobriansky, Ron Bernstein, Tonya Barham, Rahul Bahadur, Leonard Tillman, David Katz, Tim Schoechele, Heather Donaldson	Potential focus of seminar at AHR Expo in Atlanta in Feb. 23
Leadership	Lorenzo Kristov	Seemita Pal, PNNL	GWAC members on the GC	Ron Cunningham	Kay Aikin	Council

### GWAC Matrix

Kay Aikin is planning a December meeting of the Blog committee; the group will plan some new blog posts.

Ron Bernstein said that he saw stats in Linked In that there have been around 2,000 views of the Blog Posts.

Ron B. asked if the blog posts can be reposted in trade magazines.

Ron M. said there are no concerns. We may want to check for any plagiarism issues.

Ron B. said he would like to look into this, he has had some inquires.

Ron M. said decarbonization is a popular subject

Kay said it would be good if we had something formal about posting in different venues if we take the time to confirm with the author.

Ron B. said a statement from the author for republishing would be prudent. We can look at this more offline. Ron B said he's had a couple of recent inquiries about articles.

Ken Wacks said he has an issue regarding plagiarism, and he noted that self-plagiarism is a concern of IEEE lately.

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### —🕒 Grid Vision & Future State White Paper – Full initial draft

- Abstract
- Executive Summary
- Vision & Future States - good, bad
- Found Stakeholders' Visions & Future States
- Vision/FutureStates:
- Similarities, Differences, Timeline
- legend - wip-tbd
- GWAC Insights:
  - Vision/Futurestates Challenges – barriers, stakeholder impacts
  - Architectural Challenge-gaps
  - Industry Grid Drivers & Trends
  - GWAC IOP Stack Relevance to Grid Architecture
- Recommended Next Steps
- Terms & definitions à DOI(?)  
Appendices A, B, C

Ron C. said that the Future States rough draft is complete, and the assessment team is finalizing it and then it will be sent out to the GWAC for review.

He noted that there are over two pages of terms and definitions. They would like to create a DOI system similar to what NIST does. Then the length of the paper itself could be reduced.

Ron M. said he had asked the PNNL Information Release staff if we could get a DOI for this since the white paper will be cleared through PNNL IR and when approved it will be sent to OSTI.gov and it will be assigned a DOI at that time. A DOI is a fixed point of reference to a body of information such as a paper, document, or dataset. The table of terms could be maintained as a dataset as a directory of terms. He said that the PNNL IR office can help us with this.

Ron C. said that there will be other publication of terms and it will become a GWAC document.

Ken Wacks suggested checking with the IEC Electropedia before publishing.

Ron A. said that checking for duplication should definitely be done – could be we have a variation.

For the Grid Architecture white paper, Seemita is polishing the text, then it will be sent out to the GWAC for review and comments which would be incorporated. She is also still working with PNNL communications staff on graphics for the paper. If anyone has ideas about a graphic for the cover, please let her know.

**Action: GWAC send Seemita any ideas for a Grid Architecture white paper cover graphic**

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### ◉ Grid Architecture White Paper

- Working Group: Seemita Pal, Ron Cunningham, David Wollman, Ron Bernstein, Ahlmahz Negash, Larisa Dobriansky, David Forfia, Kay Aikin, Aaron Snyder, Ron Ambrosio, Lorenzo Kristov, Farrokh Rahimi, Rahul Bahadur, Gerald Gray, Mark Paterson, Timothy Schoechle, Jeffrey Morris, Leonard Tillman, Andrew Bordine, Chris Villarreal, Ron Melton
- Inputs were collected from working group members and sections have been drafted. Now polishing the writeup
- Next steps:
  - Draft will be shared with the working group members so that they can review and comment on the writeup, or make suggested improvements directly
  - Add couple of professionally created graphics in the draft – Seemita is working with an expert at PNNL
  - Any suggestions regarding what graphic can be good for cover page of report are welcome – email to Seemita

Lorenzo Kristov has been talking with the Grid Architecture for Regulators group members about a problem statement to get started on where this would be valuable to regulators and others. Members will create articles in their area of expertise where Grid Architecture was or was not used and how it may or may not add value. The group proposes to create a white paper.

They recognize that there is limited understanding and use of grid architecture by policymakers and regulators in proceedings and decisions. They are trying to address that problem and then follow with a set of case studies where each of the members of the team would contribute short articles based on specific regulatory proceedings or case studies where they had firsthand knowledge as participants or observers and where grid architecture was or was not used but where it would have or did add value.

Lorenzo will prepare a detailed paper outline with an introductory problem statement and outline for case studies. It would likely include a lessons learned also strategies for moving forward.

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GRIDWISE

### ○ Grid Architecture for Regulators

- Team = Kay Aikin, Larisa Dobriansky, Jeff Morris, Farrokh Rahimi, Chris Villarreal, Lorenzo Kristov
- Proposed white paper:
- Problem statement: Limited understanding & use of GA by policy makers & regulators, in proceedings & decisions where GA discipline & methods would be valuable
- Case studies: Collection of 2-4 p articles by team members, each about a specific regulatory proceeding they have firsthand knowledge of, where GA was (was not) applied & had (could have had) significant value in improving process or outcomes
- Conclusion: Lessons learned, ideas & strategies for advancing regulators' understanding of & willingness to employ GA methods & principles
- Tentative target for completion: April 2023

Ken Wacks told Lorenzo to expect regulator skill sets to vary. He said that was his experience working on the GWAC Constitution; his experience involved talking with regulators and he learned that there was enormous variation in skill sets.

Lorenzo said that the group hopes to capture the diversity of the regulators and that will be addressed by the various committee members. This is meant to be a strategy document for those conversant in Grid Architecture about how to bring this to the regulatory arena to help bring their discipline into the regulatory arena.

Ron A. said this document may be of help to regulatory staff.

Lorenzo said the hope is to reach regulatory venues more generally and broadly.

Paul De Martini asked which aspects of Grid Arch the group will focus on?

Lorenzo replied that he is not planning to limit team contributors. He wants them to be able to write about their experiences. But he said many regulators in proceedings start at the basic principles of grid architecture – similar to what Mark Paterson had described at the October Face to Face meeting.

In the paper they will address trends, constraints, changes needed. Grid architecture will be the starting place. Technical aspects may or may not be a part of the paper. That might be beyond the scope.

Marc Costa said he agreed with the thinking; he said there are definite knowledge gaps in the regulatory arena even with some on the ground staff who write rulings. He feels this document will be very valuable.

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Ron M. asked Lorenzo to use the newly published SEPA Grid Architecture Primer as a point of reference.

Ken and Paul discussed changes in grid architecture and various regulator perspectives.

Lorenzo said he agreed with a comment by Paul that we should not lionize California for having some level of awareness and understanding on these issues and the challenges they present. He said that even in California there is pressure on regulators to sustain the status quo structure and not talk about industry structure questions. Those issues tend to get excluded or set aside.

Lorenzo said he sees the document as a strategy for proponents of Grid Architecture to have a body of case studies and concerns, and a body of lessons learned; then if we want to advocate for the use of grid architecture, we will need to decide what we can take from the case studies and how to develop strategies for to implement the changes needed.

Larisa Dobriansky also agreed with Paul's discussion. She sees gaps across the US even including Wisconsin, Maryland, New York, and California. She said they take up issues apart from Grid Modernization and none of it is integrated with a holistic approach to grid modernization. Without a connector of some kind, you can't apply a discipline like Grid Architecture to anything because they are still using old, traditional approaches which go issue by issue.

Lorenzo thanked everyone for their comments. He will circulate something in the next week or two.

Ron Melton asked him to be sure to copy himself, Ron Bernstein, and Susie McGuire.



### 🕒 “Next Big Thing”

From discussions at F2F meeting in San Diego

- Build on Mark Paterson's efforts regarding “Back from the future”
- How do we explain to utilities and regulators that the operating model for utilities will need to change in stage 3 and stage 2 of DER deployment?
- Where do we start?





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Ron M. brought up the idea behind the next big thing. It was first discussed at the GWAC October F2F, the next session at the February F2F will build on the material that Mark Paterson has been assembling.

He used a graphic of the Sydney Harbor bridge, different than the one that Mark Patterson had used. You can see that the ends will eventually meet. This is the starting point for our discussion of the Next Big Thing.

This relates to something Lorenzo had mentioned, how do we explain the need for change to utilities and regulators?

Ron M. mentioned Central dispatch and for example, where would we start to lay out a path to speak to industry to amplify what we hear from Mark Paterson in Australia? Getting recognition that this isn't just incremental steps, they need to be strategically aimed so that the bridge will close.

Ron gave an example of an engineering leader at a utility that he had recently talked to about moving away from central dispatch. The engineer had asked why would you ever want to do that? Ron had to point out that if the scale increased from say 87 gensets to 1,000, or even 10,000 how would the current approach still work? He said that the engineer was a smart guy, but he hadn't considered the coming changes as we move to decarbonization and the kind of scales we will be dealing with as we reach Stage 2 and then Sage 3 of DER deployment.

Ken asked if we are transforming or replacing?

Ron replied that it would likely be a combination of both. We are mostly transforming but some places where we will be replacing.

Kay Aikin said that utilities and regulators are having trouble with scaling and the speed and scale of change. With that transformation we can no longer rely on incrementalism. We have to rely on holistic systems thinking going forward. From this grid architecture and other changes will flow.

Ron M. said he agreed with most of that statement but that we are always going to be building from where we are today. We can't just trip things out and replace them, we have to keep things running during the changes. If we don't direct the incremental steps, if we then let it be a random walk, then we don't end up where we want to be.

Ken Wacks said he agreed but he noted how with telephony central switches were completely replaced by client focused internet and no one missed a phone call.

Ron M. agreed and said that was a good point, you have to have an operational path that keeps going while different changes are taking place.

Ron M said we have to define a future state that considers differences such as how to define the vision of the future so we can work together in a well thought out manner. He said Kay articulated based on Mark Paterson's work, that we need to define a future state that we're working towards with these holistic approaches that consider a variety of different considerations.

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Jaime Kolln reminded everyone that transforming the grid infrastructure will be a project in the trillions of dollars; larger in scale than the changes discussed today.

Ron C. said a massive ultra-complex system isn't just about the grid – it involves business capabilities and includes all aspects of the GWAC stack, people, processes, and technology. There is multi-capability that have to be dealt with as we make this transition. We will have different iterations in transition phases. Some may be incremental, and they will be specific to aspects of people, process, technology, and culture. We need to keep a global, wholistic view – its far more than technology.

Ron C. went on to say that it may not be the Council's task to articulate the vision of the future but more how one defines the future; there's a set of tools that the industry can use to define the vision of the future holistically so that we can all work together.

Ron M. added that changes will not happen uniformly, they will vary by location.

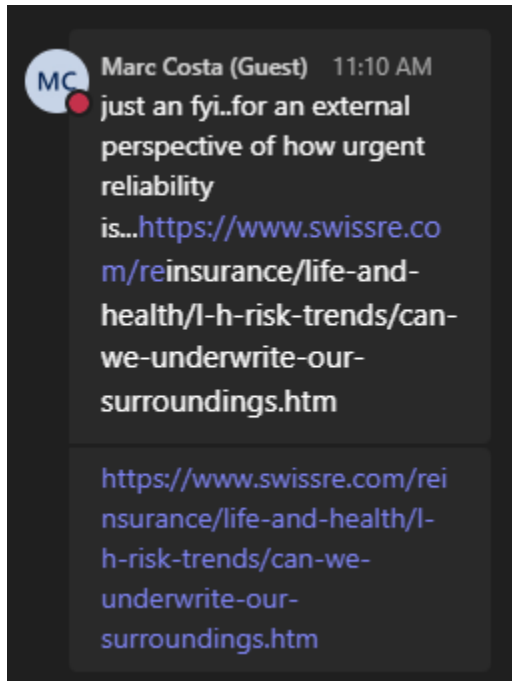
Ron Cunningham said that in talking about transition and incrementalism and those issues, we are talking about a massively complex system, the system isn't just the grid, it is business capability that includes all aspects of the GWAC stack. And it includes the people process. It includes culture and technology.

Ron M. said some of the changes will be autonomous and some will be semi-autonomous control in the distribution network. He went on to say that changes won't happen uniformly across the surface of the industry. Different utilities and regions will progress down these paths at different points in time because the drivers for change in various parts of the world are going to be different.

Ron Cunningham agreed.

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<https://www.swissre.com/reinsurance/life-and-health/l-h-risk-trends/can-we-underwrite-our-surroundings.htm>

Ron B. suggested that GWAC should have a presentation in February at the GWAC meeting in Atlanta at highlight this and then develop it more over time. We could define some short-term objectives and put together a team to put pencil out what this might look like. GWAC is scheduled to give a presentation open to all at the AHR Expo in Atlanta and then hold a GWAC meeting and workshop the next day.

Ron suggested the group formulate some talking points between the incremental definition of assets subject to replacement. We could highlight the processes, philosophy, and expectations.

Ron M. agreed, and suggested they discuss what to share at the workshop and what questions to ask participants to get them engaged and to stimulate feedback that will help GWAC in this discussion. He suggested forming a work group to plan the workshop and said he would like Mark Paterson to be involved so the meeting time should be 1pm to 3pm PST to accommodate Mark, not so great for east coasters.

Kay said it would work for her.

Ron M. said that Mark Paterson is hoping to attend the F2F in Atlanta.

Ron B. suggested that he and Ron M. talk more offline.

**Action: Schedule a Next Big Thing work group. (Done, the group met Dec. 8).**

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Ron B welcomed new guests to the meeting and encouraged them to join any working parties if they are interested. Those interested could send an email to Ron Melton, Ron Bernstein, and Susie McGuire.

Ron Ambrosio said that he would like to join this new working party. David Forfia, Kay Aikin, Larisa Dobriansky, Leonard Tillman, and Ron Bernstein agreed to participate also.

Ron B. suggested keeping the January meeting on the calendar for planning the Atlanta F2F. And he would like everyone to encourage attendees at the panel presentation to join the GWAC meeting the next day.



### ○ Liaison Reports

- NIST – David Wollman
- EPRI – Sean Crimmins
- IEEE PES – Farrokh Rahimi
- ASHRAE, CTA, CABA – Ron Bernstein
- ISO/IEC, IREC – Ken Wacks
- SEPA – Aaron Smallwood
- EBC – Tony Giroti
- NARUC – Chris Villarreal
  
- Are there other organizations we should be hearing from?
- Candidates: OpenADR, Green Button, eMerge, SunSpec, CEA

David Wollman gave a link to the next NIST newsletter – it recaps the latest PlugFest.

<https://content.govdelivery.com/accounts/USNIST/bulletins/337d160>

NIST - David Wollman noted that the new lab at NIST has some financial issues so for this FY, pending the congressional budget, so the smart grid program will need to be scaled back. There will still be a

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smart grid group but not at the same level. His division had 21M last year and it will be cut to 15M this year.

David Wollman gave a link to the next NIST newsletter – it recaps the recent PlugFest.

<https://content.govdelivery.com/accounts/USNIST/bulletins/337d160>

David said they had funded work across NIST on the cyber, physical lab with power electronics and smart meter. They will need to consolidate and focus on their test bed.

Sean Crimmins, EPRI said that right now is the EPRI deliverable season. If anyone is interested in grid data management send him an email. Also reports on distribution and transmission will be coming out that synthesize EPRI research over the last 7 or 8 years. Sean is happy to share this information, just send him an email if you are interested.

**Action: Ron M. asked Sean to send the links to Ron Bernstein, Ron Melton, and Susie McGuire; they will be forwarded to the GWAC.**

Ron M. said that the IEEE PES call for papers for the General Meeting has been extended but will close soon.

Ron B. said that regarding CTA ANSI standards things have been shifting. Tasks regarding control automation will move over to IEEE. Ron B. These include ANSI standards on IOT, edge devices, data set modeling.

Ron B. noted an ASHRAE Standards seminar on how to model data sets in building to grid situations;

<https://events.rdmobile.com/Sessions/Details/1611765>

ISO/IEC Ken Wacks said that now is the period of time between meetings and group members are busy writing standards. Ken noted a standard that he is leading called the Energy Management System. It is a base level standard that forms the foundation for all the work we're doing in energy management.

IREC – Ken Wacks – they will host a meeting tomorrow (1:30pm EST) on smart inverters and developing grid integration tactics. Our featured speaker will be Brian Lydic. Brian is the Chief Regulatory Engineer at the Interstate Renewable Energy Council. He will give a talk on smart inverters, integration, distributed energy resources and benefits of DER issues such as voltage regulation, hosting capacity and more. Ken reminded the group the meetings are open to the public so anyone who wishes to attend can do so.

SEPA - Ron Cunningham mentioned a SEPA working group that is developing DER interoperability profiles. They have developed some use cases, and templates for profiles which are applied against 61850. They are using it to center interfaces around a DER controller.

Ron M. asked about EBC – David Forfia said that Tony Giroti is working with some groups. He will reach out to him for next month.

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Ron M. asked if there are any NARUC updates. Larisa Dobriansky said the focus is on education and information regarding the IRA (Inflation Reduction Act), those are the current focus and on the JOBS Act.

California Energy Alliance (CEA) – Ron Bernstein said that he will speak at their Spring conference so there will be a speaking opportunity there. He will keep GWAC updated.

Larisa Dobriansky noted that Karen Wayland with the GridWise Alliance is likely interested in cross fertilization with the GWAC. – Larisa mentioned, and she is involved. <https://gridwise.org/leadership/>

Larisa thought reaching out to the GridWise Alliance is a good idea. She mentioned Green Button, eMerge and Mission data as well. These groups are working together, and they could add to our discussions.

Ron Melton mentioned that he had talked with K. Malika Walton with the GridWise Alliance.

PowerPoint Slide Show - [2022 NOV DRAFT GWAC Meeting slides]

Date	Topic or Speaker	Format	Other
Dec. 14, 2022	Steve Widergren and Daniel Boff – TE Practices Survey	Web	
Jan 2023	No meeting in January		
Feb. 7 – 8, 2023	AHR Expo Seminar and F2F Meeting	F2F	Co-located at the AHR Expo in Atlanta. No cost conference room provided.

### GWAC related Conference and Meetings

Ron Melton noted that the group has decided today to retain the January meeting for planning the next F2F in February in Atlanta.

Ron suggested we move the January meeting to Jan. 11 to not conflict with a conference

#### **Action: Move the GWAC January meeting to Jan 11 (done)**

Ron M. noted that the GWAC Seminar at the AHR Expo is a go regardless of a GWAC meeting. The work group is for planning that session.

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Ron Bernstein said that he had gotten a thank you from Karen Huff, US DOE Office of Nuclear Energy – for helping reviews. They are looking for more subject matter experts to review proposals. Ron noted that it is a time commitment, reviewing one proposal can take 6 hours. If someone has an interest in doing this work, he’s happy to help connect people. Kay said she is interested. Ron asked her to send him a letter indicating her interest in being a proposal reviewer and he would forward it on.

Ron Bernstein thanked everyone for attending and to be sure to respond to the poll about the GWAC F2F in Atlanta in February. The meeting adjourned.