
**MEETING MINUTES OF THE VIRTUAL
ARLINGTON COUNTY C2E2 ENERGY COMMITTEE**

11/9/2022

The **C2E2 ENERGY COMMITTEE** convened its hybrid meeting at **7:30 AM** on **November 9, 2022**.

PRESENT (IN-PERSON)

Tim Effio
Claire Noakes
Gregg Brozak
Doug Snoeyenbos
Jonathan Morgenstein
Scott Sklar
John Bloom
Stephanie Burns
Vince Plaxico

PRESENT (VIRTUALLY)

Rick Keller, participated virtually from home (via Teams)
Stephanie Gagnon, participated virtually from home (via Teams)
Kip Malinosky, participated virtually from home (via Teams)
Scott Dicke, participated virtually from home (via Teams)
Aaron Kocian, participated virtually from home (via Teams)

ABSENT

Scott Brideau
Vasu Nambeesan
Kevin Vincent

STAFF

Rich Dooley
Demetra McBride
Charles Njoku
Adam Segel-Moss
Steve Burr

PUBLIC

Joan McIntyre
Steve Eisenrauch
Rob McIntyre

SUMMARY OF PRESENTATIONS/DISCUSSIONS

1. Greetings and introductions (7:30)

- Tim Effio welcomed everyone and thanked everyone for joining the meeting.

2. Review/approve November meeting agenda and October meeting summary (7:35)

- The November meeting agenda and October meeting summary were both approved.

3. Public Comment on General Topics (7:40)

- None

4. Monthly update from the AIRE team (7:45) – Rich Dooley

- There was a presentation and discussion about the many AIRE projects and programs being implemented and making progress toward the Community Energy Plan (CEP) goals. Attachment A includes the list of projects and programs.
- J. Morgenstein asked when the next round of CEP update would start
 - A: Once the data is available in late Spring 2023, AIRE staff would work with consultants to complete an updated greenhouse gas emissions inventory. Also in 2023, staff would begin the process of reviewing the current CEP and updating it.
 - D. McBride added that staff have heard the EC's interest in modifying the CEP to a Climate Action Plan, which would add a few sections to the current list of sectors covered in the 2019 CEP.
 - C. Noakes asked how the CEP update, if it were a Climate Action Plan (CAP), would impact the rest of the Comprehensive Plan.
 - A: Staff would look at the County's Comprehensive Plan to ensure the eventual CEP (or CAP) update worked in concert with other Comprehensive Plan elements.
- S. Sklar asked whether the onsite solar assessments work would look at solar hot water or battery storage plus solar PV in addition to solely solar PV.
 - A: Battery storage plus solar PV is part of the Energy Assurance Plan (EAP) effort regarding resiliency.
- January is the expected time for the ARTbus feasibility study for engagement
 - J. Bloom noted that the TC Chair and others are against electric bus expenditures.
- V. Plaxico asked about the EV TCO study, and who reviewed and commented on it
 - The review has been done mainly by DES staff, and the DMF staff are being brought into the review
- S. Burns asked about the CMO's Office of Climate Change and Policy hiring process and how that person would interact with the AIRE team
 - D. McBride noted that Interviews are happening, and we think the goal is to have the person onboard by the end of the year
 - The person would be equal to Demetra in terms of job classification
 - The person would be a force multiplier and engage closely with AIRE on climate change work

3. EC discussion on the Energy Assurance Plan (EAP) (7:55) – Tim Effio

- T. Effio asked the rest of the EC:
 - General impressions?
 - Specific things you liked or you found to be missing?
 - Anything the EC should do with this EAP? For instance, give feedback to C2E2?
- T. Effio liked the plan. There was a lot of background, about 100 pages, and recommendations were in Chapter 7.
 - It correctly identified renewable energy as an effective means toward resiliency.
 - He liked the idea of looking at microgrids for resiliency.
- S. Sklar

- There was a gap looking at continuity of operations. For example, cell towers (privately owned), water and sewage pipeline pumps (County), backup power for DPSCEM, public safety
- Unfortunately, diesel generators are still often relied on, especially in senior care facilities.
- J. Bloom
 - Who has reviewed it; what other community stakeholders were involved?
 - A: Examples of stakeholders include the County's Public Safety Communications and Emergency Management (OEM), Human Resources (HRD), VA Hospital Center, utilities, and State and regional OEM representatives.
 - We are relying on County staff from multiple departments and the experts from Cadmus to create a sound plan.
- Claire
 - What is the intent of the report?
 - She was expecting more detail, e.g, details as to exactly where microgrids would actually go.
 - A: The SOW for this project and the report was not intended to go into that level of detail.
 - T. Effio – thought there were too many recommendations. It is unclear which one should be done first, second, etc. Hard to make it actionable. The recommendations should be prioritized.
- S. Burns
 - Next steps after this report?
 - A: We would plan to work with internal and external stakeholders, including our utilities, to conduct a gaps analysis, prioritize the recommendations, and pursue funding to implement multiple recommendations.
 - She asked whether the consultants can prioritize the recommendations. She thinks the EC should put markers from the list of recommendations should be prioritized.
 - A: Staff together with stakeholders would be in the best position to prioritize recommendations based on Arlington-specific needs. In addition, such a prioritization process would be outside the scope of the project's scope of work.
- T. Effio said the EC can make the recommendations to the CMO regarding what the County needs to do regarding next steps.
- Claire
 - How nimble is County planning and operations based on what they learned from the pandemic? For example, if everyone were asked to telework, there could be months of planning before implementation. However, with the pandemic, the County was forced to act quickly when it came to teleworking. Can we simply launch into implementation without over-planning?
 - A: DJM – there are many priorities across the board for the County. Those are policy decisions that we cannot opine on.
 - DJM went on to say that she plans to reach out to San Diego given their expertise and experience regarding microgrids.
- T. Effio said that missing from the report is the change in pace of the grid due to electrification of the buildings and the transportation sector. So, the recommendations do not focus enough on the issues surrounding grid resilience.
- S. Sklar told everyone to not forget about vines, squirrels, and other things that can and do impact the grid
- G. Brozak stated that when he moved here, he was surprised (after growing up in Queens) by all of the wires that weave their way through and under trees.

- C. Noakes noted that projects can lead to undergrounding wires, but all Dominion ratepayers need to pay into such projects
 - S. Sklar noted that even undergrounded wires have their issues
- V. Plaxico thought the electrification of the transportation sector was relatively light – not enough emphasis was put on that topic.
- S. Sklar noted that Montgomery County has a microgrid associated with its bus terminal
- G. Brozak highlighted that battery technology is improving rapidly and we should be able to take advantage of it
- J. Bloom said that text about CNG being used in ART bus fleet could lead to public misunderstanding. CNG is not as “clean” as current alternatives. See pages 28 & 103 in the EAP.
- D. Snoeyenbos asked whether the consultants provided only one version of the report.
 - A: No, what you see here is the result of an iterative process involving the consultants and County staff experts from across multiple departments
- T. Effio asked about next steps.
 - Should the EC produce a document that focuses on next steps, what the EC proposes on next steps?
 - S. Sklar said the EC could raise issues that could be updated by staff and would not need consultants. We could also highlight the things we’d like to be done first based on this report.
 - J. Morgenstein liked the idea of prioritizing next steps toward implementation.
 - S. Burns suggested that the EC recommend a process or system by which prioritization would happen
 - C. Noakes noted that staff might not have all of the data they need from all parties to make an educated guess as to what should be a prioritized list of to-do items
 - Any volunteer(s) to draft a memo? Overall, the report is good. There are some areas for improvement.
 - **ACTION:** S. Sklar said he is willing to do it, given R. Dooley’s notes

4. Energy Resiliency – Dominion Energy perspectives (8:45)

The following Dominion Energy representatives joined the EC and the EC’s discussion about energy resiliency:

Colleen Wallace Energy Solutions Program Manager Colleen.e.wallace@dominionenergy.com	Kate Staples Director – Electrification Kathleen.d.staples@dominionenergy.com
Ellen Jackson Electric Distribution Program Manager Ellen.e.jackson@dominionenergy.com	Dale Bowman Key Account Manager Dale.bowman@dominionenergy.com
Bill Kurz, Director - Tax william.j.kurz@dominionenergy.com	West Ailsworth Tax Specialist michael.w.ailsworth@dominionenergy.com

- Dale Bowman introduced the Dominion Energy staff
- Resiliency innovations?
 - E. Jackson described the Non-Wires Alternatives Program. The “Non-Wires Alternatives” term is often used for any electrical grid investment that is intended to defer or remove

- the need to construct or upgrade components of a distribution and/or transmission system, or “wires investment.”
- This program looks at things like battery systems. Dominion Energy needs to bring it to the SCC for approval.
 - There was one pilot – Hanover Substation – to peak-shave the transformer.
 - Aim is to figure out how to defer capital investment and make it cost-effective.
 - For Commercial & Industrial (C&I) customers, Dominion Energy works to help them reach their goals, for instance using behind-the-meter battery systems. A tiered discount is planned to be provided. A Distributed Energy Resources (DERs) program will be part of the approach.
 - Dominion Energy will own and operate the assets.
 - Dominion Energy is getting C&I feedback before bringing the program forward to the SCC.
- T. Effio – asked about approach:
 - There are free market approaches where a customer can buy and use their own battery systems for peak-shaving. Or, they could enter into the DVP program. Why would a customer go the Dominion Energy system route?
 - A: Dominion Energy is seeking feedback to fine-tune the tiered structure, including discounts, such as a 7-11% discount for certain sized-batteries. Dominion Energy welcomes feedback from the EC and others.
 - This is the C&I Behind-the-Meter Energy Storage Program
 - D. McBride asked how Dominion Energy is enabling the electrification of buildings and transportation
 - A: Dominion Energy forecasts load growth during the Integrated Resource Plan (IRP) development process
 - J. Morgenstein
 - He noted the SPRC meetings where developers have told County staff that projects cannot put in EVSE, electrify a building, and do other things because Dominion Energy makes it cost-prohibitive to do so. That seems opposite from what Dominion Energy staff are explaining today.
 - A: Dominion Energy asked the EC for specific details about the projects. Yes, there are credits for line extensions, which can make it low or no-cost to project developers. There can be a low cost to adding to the capacity.
 - There should not be a capacity issue for projects.
 - However, if another transformer is needed for the project, there can be space constraints to site a new transformer – which is not a capacity issue.
 - Since Dominion Energy is integrated across distribution, generation, and transmission (which is different than Investor-Owned Utilities (IOUs) in other parts of the country), so Arlington land developers might not know how to best deal with Dominion Energy
 - Siting and sizing is challenging for developers
 - V. Plaxico noted that Dominion Energy is noted in his professional experience as being outstanding to work with compared to other utilities across the country.
 - Vehicle-to-Grid (V2G)
 - Dominion Energy has a large V2G program pilot. V2G is not plug-and-play. There are software handshakes that need to happen, e.g., technology needs to talk with one another, technical standards, Institute of Electrical and Electronics Engineers (IEEE) standards for bi-directional power flow.
 - The grid is being upgraded, but the industry itself needs to catch up in creating new standards.

- The school bus program is going well, but Electric Power Research Institute (EPRI), Federal Energy Regulatory Commission (FERC), other partners all need to be included
- Storage can definitely come into play to make the economics work and to make the grid more resilient.
- Dominion Energy welcomed another meeting to go into more detail about EVs and EVSE
- How is Dominion Energy enabling growth in distributed generation?
 - Dominion Energy forecasts where renewable energy is being used and where it might be used more in the future
 - Dominion Energy will review inverters and the system to allow for net metering without larger system upgrades to protect the grid system.
 - Dominion Energy has to study each of those specific upgrades.
 - There is an Interconnection Guide available onsite, and a map showing where renewable energy could be added without costly grid upgrades.
 - [This website](#) provides general interconnection steps, while [this website](#) explains how to apply for parallel generation and interconnection requests.
 - Dominion Energy selected a provider for a distributed energy resources management system (DERMS) solution and to manage distributed generation assets.
 - D. Bowman provided [this link](#) to the DERMS press release.
- T. Effio said some outstanding questions that would be helpful for Dominion Energy to answer include:
 - How is Dominion Energy monitoring the true adoption curve for EVs and EVSE growth?
 - A: A Dominion Energy VP is monitoring the trends nationwide and locally. They recognize there is a need.
 - Dominion Energy thinks that it can manage the anticipated growth, especially since the switch from internal combustion engine vehicles to EVs will not happen wholesale overnight.
 - There needs to be a separation of discussions between 1) electrification and 2) distributed generations.
 - The DERMS will make great strides to help manage the planning.
- **ACTION:** Go through D. Bowman for next questions, follow-up

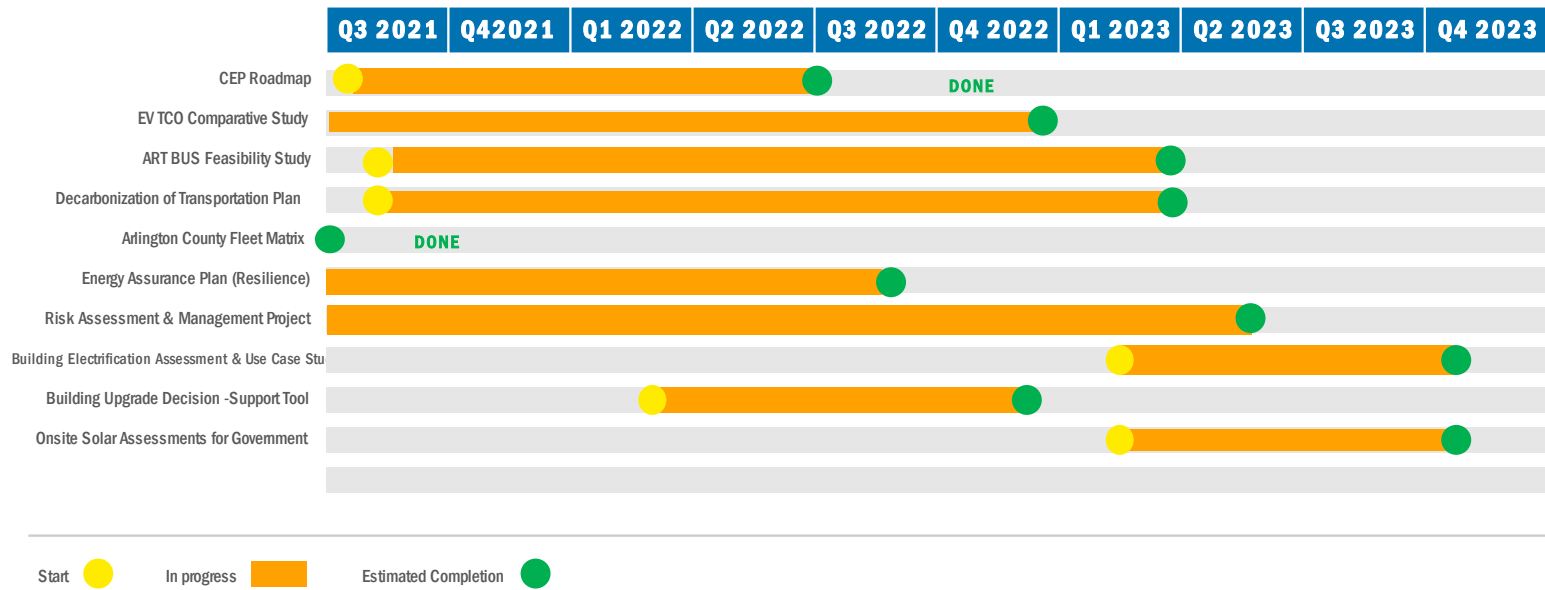
5. Adjourn (9:30)

- The meeting adjourned at 9:34 am

ATTACHMENT A

AIRE Projects and Plans Update

Progress Report on Studies and Plans



Progress Report Notes

Amendments:

- **CEP Roadmap:** Final Roadmap is on the CEP webpage:
<https://www.arlingtonva.us/files/sharedassets/public/environment/documents/cep-roadmap07-26-2022-with-cover.pdf>
- **EV TCO Comparative study:** Consultants incorporating comments. Estimated schedule to complete: Q4 2022.
- **ARTBus Feasibility Study:** Study to be done by Q1 2023 to allow for engagement
- **Decarbonization of Transportation (DecTrans) Plan:** Is in progress with KH. Q4 2022 for draft plan, and Q1 2023 for final plan.
- **Fleet Matrix:** Details from this project to be woven into EV TCO Comparative Study/DecTransPlan.
- **Energy Assurance Plan (EAP):** Dominion Energy provided additional data to Cadmus on 8/22. Cadmus incorporated the additional data to update the EAP. County staff are reviewing the updated EAP.
- **Risk Assessment & Management Plan** RAMP Task 5 (Vulnerability/Risk Assessments) presentation delivered. The Task 5 Technical Memorandum draft is under staff review. The Task 10 (Market and Trends Report) delivered in draft, reviewed ~~attached~~ with comments (estimated final delivery in Oct. 2022).
- **Building Electrification Assessment and Use Case Studies:** Builds on previous SWA report. With FY23 funding available, project will move forward after the Energy Services Contract RFP is completed. Report slated for Q4 2023.
- **Building Upgrade Decision-Support Tool:** Working with the consultants, FMB, and FD&C in recent project meetings. Planning on a draft internal tool for use by the County staff by Q4 2022.
- **On-Site Solar Assessments Project** With FY23 funding expected to be available, project will move forward after the Energy Services Contract RFP is completed. Report slated for Q4 2023.