

Connecticut Distributed Generated Interconnection Working Group Meeting Summary

State of Connecticut Public Utilities Regulatory Authority Office of Education, Outreach & Enforcement

November 6, 2023

Notetaker: Aileen Cole, GPI

Introduction

The Public Utilities Regulatory Authority's (PURA or Authority) Office of Education, Outreach, & Environment (EOE) selected the Great Plains Institute (GPI) to provide neutral, third-party facilitation services for the ongoing Interconnection Working Group (IX WG). On November 6, 2023, GPI facilitated the first IX WG meeting after being selected to fill this role. The IX WG previously consisted of two separate working groups: The Interconnection Policy Working Group (IPWG) and the Interconnection Technical Working Group (ITWG). Unless otherwise specified, these two working groups will be combined as a singular IX WG moving forward.

The November 6, 2023 meeting aimed to introduce IX WG participants to the new GPI facilitation team, identify topics that the IX WG will discuss moving forward, and level-set on recent progress and on the process moving forward.

GPI's facilitation team consists of the following staff:

- Aileen Cole—Senior Policy Research Specialist, Energy Systems
- Val Stori—Senior Program Manager, Renewable Energy
- Trevor Drake—Interim Vice President, Energy Systems

At the start of the meeting, Aileen Cole and Val Stori introduced themselves, GPI as an organization, and their facilitation role. Trevor Drake was not in attendance but will attend meetings on an as-needed basis. Next, EOE Staff introduced themselves. Aileen Cole then provided an overview of the planned meeting agenda.

Agenda Overview

1:30pm Introductions, process update, agenda overview

1:45pm Discussion: IX WG direction and topics

- Time-sensitive items directed by PURA
- Identification of additional items IX WG members wish to discuss

2:30pm Discussion: IX WG process and meeting structure

- Overview of proposed approach for meetings moving forward
- Opportunity to discuss things that worked/did not work with the process or working group structure up to this point

2:55pm Wrap-up and next steps

3:00pm Adjourn

Next, Aileen provided an overview of the meeting goals and the ground rules, as follows.

Meeting Goals

- 1. Introduce IX WG participants to the new meeting facilitators, and vice versa.
- 2. Level set on recent progress made in the IX WG in Summer 2023.
- 3. Identify desired directions and topics to discuss moving forward, as informed by PURA Orders and participant interests.

Meeting Ground Rules

- Respect each other. Help us to collectively uphold respect for each other's experiences and opinions, even in difficult conversations. We need everyone's wisdom to understand complex problems.
- 2. **Be receptive and adaptive.** Recognize and allow opportunities for participants' opinions to change based on new information, insights, and perspectives.
- 3. **Make resources available.** Facilitators will ensure that meeting materials and resources are available to participants. Participants are encouraged to identify resources, such as reports, that can help to increase the collective knowledge of the group.

Discussions

Next, GPI facilitated discussions focused on IX WG goals, direction, and process moving forward, and on the IX WG process and meeting structure. Key takeaways from these discussions are summarized below.

Time-Sensitive Orders and Other Topics of Interest

Participants discussed the following recent and time-sensitive future IX WG topics, as informed by PURA Orders.

Dockets 22-08-05/23-08-05: Annual Energy Storage Solutions Program Review – Year 3

On September 1, 2023, the EDCs submitted their Compliance Filings in accordance with Order No. 10. According to Sara Pyne (Connecticut Green Bank), these filings met the requirements outlined in the Order. Currently, no items remain to be filed by the EDCs.

Eversource noted that though the EDCs filed the required technical and process-related interconnection guidelines, these guidelines have not yet been officially adopted because this requires a PURA Order. Such an Order has not yet been issued.

This docket does not currently contain time-sensitive items.

Docket 23-08-02: Annual Residential Renewable Energy Solutions Program Review – Year 3

Meter Socket Adaptors (MSAs)

- Brian Rice of Eversource Energy (Eversource) provided an overview of PURA's November 1, 2023 Final Decision in this docket, as informed by Item #35 in PURA's October 12, 2023 Proposed Final Decision.
 - Order No. 35 directs the electric distribution companies (EDCs) to file a summary of their concerns related to MSAs by April 10, 2024.
 - The summary should provide information on safety concerns and should include proposals for mitigation strategies that would address identified issues.
 - Prior to filing, the EDCs must share their summary with the IX WG. The IX WG can provide feedback on this summary and the EDCs should address that feedback to the extent possible in their April 10th filing.
 - EDCs provided some detail on this topic in last year's annual review, but PURA wants additional detail—EDCs will provide additional detail, but doing so will require significant effort
- Brian Rice, Eversource: Eversource's meter safety and operations groups will likely prepare this filing.
- Joseph Marinaccio, United Illuminating (UI): UI's approach to complying with this Decision will be similar to Eversource's.
- Emily Peck, ConnectDER (an MSA manufacturer): Good that MSAs are being addressed, but they should be addressed more rapidly. Other states have had a 90 day safety evaluation timeline.
- Anticipated timeline for EDCs to present findings to the IX WG and for IX WG participants to provide feedback:
 - Eversource TBD (likely not until 2024)—has not yet met internally to discuss this
 - UI will have an estimate following today's meeting
 - IX WG participants will need to consider how much time they will need to review and provide feedback

Trough-Type Connections

- Docket 23-08-02 also directs EDCs to develop and submit a plan that identifies and mitigates safety risks with trough-type connections.
 - o EDCs must submit plan to PURA for review by March 15, 2024.
 - o EDCs must consult with the IX WG when developing their plan

Dockets 22-08-03/23-08-03: Annual Non-Residential Renewable Energy Solutions Program Review – Year 3

- Item #16 in PURA's Proposed Final Decision (October 20, 2023) directs EDCs to work with the Connecticut Solar and Storage Association (ConnSSA) and IX WG to resolve meter relocation issues
 - Currently a Proposed Final Decision, but will likely be included in PURA's final Order

- Noel Lafayette, SHR Energy: EDCs have been requesting that existing meters be relocated, but meters may be in varying locations, which can cause significant engineering/economic hardship.
 - Current approach to determining whether a meter needs to be relocated seems subjective and can be cost-prohibitive.
 - o Especially problematic for commercial and multifamily residential
 - Want a standardized approach to what existing meters do/do not need to be relocated, and why. Seems subjective, is cost-prohibitive. Mostly commercial, likely to become a problem with multifamily.
- Joseph Debs, Eversource: Meter relocation issues also occur in single-family residential circumstances in which the existing meter is in the basement but associated service runs underground.
 - Eversource understands that meter relocations can be a challenge for projects.
 - Open to working through this with the IX WG to identify an effective policy.
 - Eversource's initiative will be driven by its meter operations/engineering personnel.
- Noel Lafayette, SHR Energy: Given that Connecticut will be slowly deploying smart meters, could meter relocations and smart meter deployment occur simultaneously?
 - UI: UI already has advanced metering infrastructure (AMI) deployed across its service territory, but still has communications issues in instances in which the meters are located in a basement.
 - UI converting customers' meters on an as-needed basis to address this
- Kayte Morales, Environmental Systems Company: In circumstances in which a production meter is being added, but not as a new service or service upgrade, why must the existing (i.e., non-production) meter be moved outside? Two relevant problems:
 - Smart meter installation
 - o Identifying why a solar netting generation meter would need to be moved outside
- Jeff Hintzke, Greenskies Clean Energy: Meter relocation issues occur on buy-all
 configurations under the Non-Residential Renewable Energy Solutions Program
 (NRES). Because this is considered a service upgrade, EDCs require parties to adhere
 to the latest meter relocation rules (i.e., outside). But there's no technical reason why the
 meter needs to be moved outside.
- Mike DiPanfilo: Different parts of the state execute new service/field engineering associated with NRES program implementation differently because the 2018 *Information* & *Requirements for Electric Supply below 600 Volts* ("I&R") guidelines are vague. Want more specific guidelines and clarity on implementation.
 - Robert Cote, Eversource: The I&R book has been updated; Eversource wants to ensure that it is being utilized and implemented universally.

Other Time-Sensitive Items to Discuss

Side-line taps (suggested by Noel Lafayette, SHR Energy)

- A project might be designed/budgeted with the intention of using a side-line tap
- EDCs no longer want this to be allowed—want interconnections to go to the outside transformer instead

- Transformer requirement has large financial implications, which can hold up projects
- Addressed in NRES docket

How FERC Order 2023 will impact Connecticut's interconnection processes

- FERC Order 2023 is intended to improve transmission interconnection processes
- Dictates that some distribution studies will require a cluster study approach.
- ISOs have until April to file their strategies to comply with FERC Order 2023
 - EDCs trying to complete all transmission studies that are currently underway before this deadline
 - Transmission studies not yet started likely will not be started until May 2024, and may not be completed until Summer 2025
 - Only projects that have paid for their study will be included in the current process.
 - Projects that will pay for their studies in next two months will be included in the May cluster.
- Due to FERC Order 2023, Eversource and UI may not be able to issue interconnection agreements immediately after completing distribution studies
 - Order likely to cause delays
 - Could be 1–1.5 years before re-starting issuance of interconnection agreements

Opportunities to streamline meter relocations with smart meter deployment (suggested by Noel Lafayette, SHR Energy)

- State has plans to deploy smart meters
- Opportunity to address both needs more efficiently

Additional Topics of Interest to Participants

Cost allocation

- Suggested and/or supported by Mike Trahan (ConnSSA), Noel Lafayette (SHR Energy),
 Richard Labrecque (Agilitas Energy), and Lavelle Freeman (Eversource)
- Addressing cost allocation is necessary to meet Connecticut's policy goals
- Need to align deposits, payments, etc. with the reality of construction. Developers make
 a payment with their interconnection agreement, but the project might not be constructed
 for another two years. Must the payment be received then, or could it be made later?
 - Interest in requiring that payments start being made once a construction schedule is established/formalized
- Need clarity on what must be paid at which step(s) in the process, and why payments must be made at that time.
- Opportunity to pursue innovative financing mechanisms (e.g., making payments at different milestones, potential for utilizing "non-cash" financial instruments, etc.)
- Interest in resurrecting the NRES Cost Sharing docket (Docket No. 22-06-29)
 - Some areas in Connecticut are seeing significant grid constraints
 - Could look to Massachusetts Capital Investment Plan approach—utilities identified and made upgrades necessary to support DER deployment, and the costs associated with those upgrades are allocated across DER group members and ratepayers, based on identified broad system benefits

Interconnection studies and study timelines

- Suggested/supported by Mike Trahan, ConnSSA and Noel Lafayette, SHR Energy
- If an impact study is completed for a project, subsequent projects located nearby should not need to be as expensive or time consuming as they currently are
- Clarification on impact study requirement threshold from Joseph Debs, Eversource: ISO
 NE determined that if a project is >1MW, it requires a study. Projects located nearby one
 another have a separate threshold (if their aggregate generation is 20MW for a single
 substation)
- Clarity on what constitutes a significant vs. moderate project change/modification, and what is triggered by that distinction—causes timeline delays
 - Initial one-line diagrams are unlikely to exactly match final equipment plans and facility design upon completion several years later
 - Especially difficult for storage facilities—storage technologies are changing fast and have long lead teams.
 - Want more flexible rules for developers that may need to change equipment.

Flexible interconnection

- Suggested by John Mosher, Solect
- Flexible interconnection could limit potential exports from behind-the-meter sites if needed
- Flexible interconnection pilots could be discussed in conjunction with cost allocation
 - A zero-export system would have lower grid impacts
 - Lower grid impacts could result in lower upgrade costs (and, accordingly, less cost to be allocated across parties)

Communications strategies

- Suggested by Noel Lafayette, SHR Energy
- Utilities should have a single point of contact that specific developers regularly work with
- Different utility staff and different departments may have different perspectives
- Want a clear, standardized chain of command.

IX WG Process and Meeting Structure

GPI shared their general proposed approach for IX WG meetings moving forward. The proposed approach involves monthly 90-minute IX WG meetings, combined with both policy and technical working group members present. This approach can be adjusted on an as-needed basis.

- Establish what constitutes consensus (simple majority, 100% agreement, 80% agreement, other?)
- Shorter agendas are better than longer ones
- Difficult to track where we are on different items—want some way to track info
- Add clarity on what docket combined the WGs

Next Steps

- Most future communications emails, meeting invites, etc. will come from GPI (Aileen Cole, acole@gpisd.net); some communications may still come from EOE Staff
- Items for GPI to send to IX WG participants
 - o Meeting invitations and agendas
 - o Survey for recurring meeting dates
 - Meeting notes
- Notetaker for December meeting: Mike Trahan, ConnSSA