

General Stakeholder Meeting – September 19, 2019

Xcel Energy	Neil Cowan, Eric Van Orden, Kevin Cray, Stephanie Voss, Kerry Klemm, Jack Ihle, Shawn Queenan, Jeremy Lovelady, Kristin Gaspar
AES Distributed Energy	Derrick Worden
OCC	Chris Neil, Tom Dixon
Energy Advantage Roof and Solar	Jeremiah Broz
City of Boulder	Matt Lehrman*
Boulder County	Dave Hatchimonji
CEO	Jocelyn Durkay, Lindsey Stegall, Ryan Harry
Community Energy	Sam Sours*
COSSA	Mike Kruger
City of Denver	Jonathan Rogers
EPA	Tim Rehder
Energy Outreach Colorado	Andrew Bennett
Grid Alternatives	Tom Figel
IBM	Jay Paidipati
Independent Advocate	Karey Christ-Janer
WRA	Ellen Kutzer, Gwen Farnsworth, Aaron Kressig
CO Army National Guard	Brett Jackson*
McKinstry	Keith M.*
Namaste Solar	Kyle Sundman*, Eliot Abel
Photon Brothers	John E. Johnson*
Pivot Energy	Daniel Merkle, Jon Sullivan*
Solar and Petros Pace	John Bringenberg*
SEIA	Sara Birmingham*
SunShare	Corrina Kumpe
Sunrun	Chelsey Sterling
Earth Justice	Michael Hiatt, Marta Darby

>>Note: Hearing everyone on the phone was difficult so if you are not represented, please let us know and we can add folks to this list. *On Phone

I. Welcome and Introductions

- a. Kevin welcomed everyone and did an overview of the meeting's agenda.

II. Dashboards – Eric Van Orden

- a. Large Program
- b. Solar*Rewards Community (CSGs)
 - i. Subscriber mix
- c. On-Site Storage

III. Solar*Rewards Community (CSGs) – Shawn Queenan

- a. Kyle (Namaste Solar) – Interconnection rules/processes timeline (Later in meeting).

IV. Energy Analysis and Adders Tool – Eric Van Orden

- a. Energy Analysis Tool will be posted at the end of the month

V. Regulatory Update – Neil Cowan

- a. 2020-21 Renewable Energy Compliance Plan
 - a. 10/23 – Answer Testimony
 - b. 11/18 – Rebuttal Testimony
 - c. 11/25 – Settlement
 - d. 12/10 – 12/12 – Hearing
- b. Electric Rate Review (Proceeding No. 19AL-0268E)
- c. Electric Vehicle Commercial Rate (Proceeding No. 19AL-0290E)
- d. Rulemaking (Proceeding No. 19R-0096E)

Discussion

- Carrie Christ-Jenar – Will Distribution Resource Planning be its own proceeding?
- Neil - Most likely.
- Jocelyn (EOC) – Electrification Spreadsheet – timing on that? Non-Developers view it?
 - Eric – It is public and we will post it on the website by the end of the month.
 - Kristin – webinar will happen.
 - **ACTION ITEM: Kevin send COSSA reminder email to send notification to COSSA members**

VI. Case Study – Imboden Substation

- a. Imboden is southeast of airport
- b. Imboden was build out of distribution system from 206 report (annually) from 2007 for load growth in Aurora area

- c. Solar Gardens have grown around the areas substantially since 2013.

Discussion

- **Carey** - how many other substations in similar station?
 - **Chad** - 2...thinking of 5 MW, we may see a lot more of these in the future.
 - o This substation is adjacent to metro area with many subscribers.
 - **David** - Correct the statement. The no capacity was given related to 2 substations. The whole swath of territory has been deemed off-limits including San Luis Valley. There are ~150 substations no capacity for something like this, for other reasons, you cannot interconnect problems whereby there is a focus on these substations. Much of the co-op territory, you can't build there, even if they are Xcel Energy substations. Take another lens of jurisdictional concerns, AHJs like solar in one location but not spread out in many areas (think auto dealerships). The RFP design encourages this behavior by seeking lowest cost. Accuracy of hosting maps is another limitation. Xcel Energy has planned to develop software that will provide more information in 2-3 years. "There might only be 5-6 substations that can host substations". Only got slides 50 minutes before meeting.
 - **Carey** – Inherent challenge without more data and mapping, plus locational net benefit. Ideally, you'd want to build near load. Maybe we can bring this in when DSP rolls in.
 - **David:** Suggested looking at a map off all of the state.
 - **Chad:** This is a distribution sub issue, while SLV is transmission.
 - o 40 substations with interconnected or proposed gardens.
 - **COSSA:** Xcel Energy isn't in charge of all of this. But, customers want solar now and the situation
 - **Chad:** There may be an opportunity to discuss further how to align utility world and developer screening for sites. Hosting capacity maps won't be exactly what developers are looking for. There are other resources.
 - o Locational Marketing Pricing (LMVA) for Transmission
 - o Targeted stakeholder date in late October to follow on from SRC meeting from Monday, 9/14
 - **COSSA:** Sees a similar problem for on-site issues in Golden at smaller distribution level. Not just an CSG issue. Customer cancels because of the cost for transformer.
 - **Chris Neil:** Why is this sub limited to 35 MW?
 - **Chad:** 1 transformer 50 MVA, 2 feeders that serve the area. This is a Feeder, not sub or transmission issue. Thermal Limits, with about 18 MW on each feeder.
 - **COSSA:** Why can't developer install a third feeder?

- **Chad:** We have to plan for outage, maintenance, etc. we can't expand because it would restrict switching during maintenance/operations. Today, the feeders interconnect to other subs. The way the system is designed there is more flexibility in a more urban areas.
 - **David:** Disagrees from a technical perspective. The response has altered over the past 6 months. David submitted the "no capacity notice letter" to the PUC in April. DHO said XE Engineer said sure to dedicated feeder, XE Policy said no, XE Engineer said we won't remember to operate this special.
 - **David:** This isn't a technical issue. But, there are technical solutions.
 - **Chad:** Sent the letter early on to plan for it. But, those conversations were exploratory and there are risks, in one off solutions and more.
 - **David:** Let's create policies to enable capacity to increase, such that we can upgrade at our own cost.
 - **Chad:** Similar conversations in MN. Thermal limit is what it is until load increases, substation changes, etc. There is an opportunity to reach beyond to other areas.
 - **David:** This is not isolated situation. Quincy too. Hounding on staff capabilities at Xcel Energy and they need to change.
 - **Chad:** It's not trivial. How far does it go beyond dedicated feeder, transformers, and beyond, Who pays for it. It will be an continuous conversation about the evolution to the grid.
 - **Craig:** What is Distributed Generation? This is expanding beyond it. The program is designed to off-set load, and there is no more load.
 - **COSSA:** The company is getting what we are directing from the RFP. COSSA is providing options.
 - **Beth:** We have to think about unintended consequences, for example how do we balance needs of large solar, CSG, on-site.
 - **COSSA** wants to work within the program.
 - **David:** Disagrees with DER definition, that it's to offset load. We've answered questions for how do we solve for load growth, over the decades. We've answered how to integrate new renewable generation. But, how do we
 - **Carey:** DSP rules will be where to explore this. Legislature also directs DSP.
 - **David:** Agreed. But, the program says they have 24 months.
 - **Kerry:** There is no capacity. Any path to capacity at Imboden isn't not going to happen in the short term. There are options at other locations.
 - **Beth:** Do you propose transmission interconnect?
 -
- d. Screens/Studies – future bottlenecks (substations)?
- **Chad:** Need to understand use cases.

- 2 weeks of issues at substations so we can discuss at the October meeting.
- **Action Items: List of issues within two weeks**

a. Wrap Up and Action Items

- a. Q3 Meeting - TBD
- b. Stakeholder meetings technically end at the end of 2019; the question if a quarterly stakeholder group continues past 2019
 - i. No opposition was given; COSSA wants to keep them at quarterly