

## **Future/Existing Programs and Grid Stakeholder Meeting – August 24, 2018**

Xcel Energy	Neil Cowan, Ryan Matley, Eric Van Orden, Kevin Cray, Stephanie Voss, Kerry Klemm, Kristin Gaspar, Jaclyn Webb, Jack Ihle, Jeremy Lovelady, Shewit Mikael
OCC	Chris Neil
City of Boulder	Matt Lehrmanm
City of Denver	Tom Herrod
CEO	Lyndsey Stegall, Amy Hollander
Clean Energy Collective	Justin Wilson*
COSEIA	Taylor Henderson
Denver Housing Authority	Chris Jedd
Set Ventures Group	Walter Sharp
Grid Alternatives	Tom Figel, Adrienne Dorsey
Independent Advocate	Karey Christ-Janer
WRA	Erin Overturf, Ken Wilson
CO Army National Guard	Brett Jackson*
Microgrid Energy	Daniel Merkle
Namaste Solar	Rick Coen*, Taylor Ryan, Heath Mackay
AEP	Dan Golnik
EPA	Tim Rehder
Smarthome Labs	Tim Schoechle
STAFF	Fiona Sigalla*
U.S. EPA	Tim Rehder
EOC	Andrew Bennett*
Vote Solar	Rick Gilliam

**>>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 & Introductions**

Kevin started meeting with introductions and Neil went over action items from last meeting.

### **Previous Action items:**

#### A. Transitioning from Windsource

##### a. Brett Jackson

- i. The feds are interested in switching to Renewable\*Connect
- ii. Feels getting the right stakeholders together in order to get a solution is the best option and what has been lacking in the discussions earlier.
- iii. Goal is to work through this until the next quarter.
- iv. **This remains an action item.**

## **II. Renewable\*Connect – Jaclyn Webb**

#### A. Phase 2

- a. 36 customers were given a portion of what they asked for
- b. Once this program closed, a waitlist is now available

### **Discussion**

**Are customers who are given an allocation in the first release and would like if more should they be waitlist as well?**

- Correct.

**Will you be re-evaluating the bill credit?- Karey**

- The 2019 bill credit will be available in the early November of December timeframe.

**Will the total demand for the program ever be disclosed?-CEO Li rep and Erin-WRA**

- Currently, this information is not available for general disclosure.

**Is there potential for another follow on project?- Erin-WRA (western resource advocates)**

- It's in the early stages of development. Also adjusting the program due to feedback is essentially what stakeholder meetings, such as these, are for.

**Do you have any indication that many customers move from wind source to renewable connect?-Chris Neil**

- There has not been a drop in wind source customers.

### **III. Dashboards Presentation – Eric Van Orden**

**ACTION ITEM- We will discuss internally about putting monthly RESA on website**

#### **A. Monthly Customer solar program dashboard**

- a. Stakeholders had requested more numbers in regard to solar program.
- b. The dashboard provides the number of Megawatts and number of applications, within the program.
- c. Eric would like clarification in the numbers wanted and what clarification stakeholders need.
- d. We are currently above 120 kW in applications.
- e. The bar charts refer to the small programs.
  - i. All of this data is again available on the Solar program Xcel site.
- f. Medium Program
  - i. The medium program is staying open longer.
  - ii. The cancelled projects are related to a lack of deposit.
  - iii. Open for 47 days.
- g. Large Program
  - i. 2019: 14 MW will be offered.
- h. On site batteries
  - i. This is not available on a site
  - ii. Since early 2018 there have been 293 applications

#### **Discussion**

**Could Xcel put the dashboards and reports on their website?**

- Yes. They are on our web site.
- This data only includes solar rewards.
- The monthly RESA Reports are filed under 06S-016E.

**What is the total installed MW customer owned?**

- Above 120 MW

**What is the average size of the batteries?**

- 5-6 kW

## IV. Colorado Energy Office Presentation – Amy Hollander

- A. Mission is to find cost effective energy services.
- B. The weatherization program added solar ie. the CEO LI
  - a. This made Colorado the first state to include Solar in their weatherization services.
- C. Solar for low income:
  - a. The market trend of cheap solar meant it became apparent that it could be viable through a state program.
  - b. The program is also funded by the department of energy.
  - c. 25% of the leap fund to do the solar program. The use of XCEL, leap and DOE funds are being used to make this program possible.
- D. Goal of Low Income Program
  - a. Reduce cost of energy and the energy burden
  - b. CO: 1 in 5 to one in 4 experience a sever energy burden.
- E. Locations of Systems
  - a. San Luis Valley: They are working with an in house installer in order to reduce costs.
- F. Barriers within the program
  - a. Roofing that is in poor shape, made it difficult to install
  - b. Electrical panels that are in need of upgrading.
  - c. The CEO applied for internal funds to assist on fixing these barriers in order to continue to serve the low income community.
- G. Goals for the CEO
  - a. To make the solar program permanent.

## Discussion

### **Do you have goals for regions? (Brett)**

- Yes, CEO works in 4 regions and works with specific installers within that region. Every county has weatherization funding and has a service every year.

### **Weatherization is 25% of leap funding, is this an increase? (Brett)**

- In the past CEO received 15% and today it is 25%.
- In most of the country LEAP only provides 5-15% funding.

### **LEAP has seen a decrease in application so they have more funding to allocate. (Andrew)**

### **Is solar focused on customers with electric heat? (Ken)**

- Yes, CEO looks for customers with electric based-heating.

### **DO you have any estimates on monthly savings? (Kevin)**

- It should reduce the cost of electricity 50-75%, in order to be cost effective.

### **Is there a plan to replace inverters or make repairs? (Kevin)**

- The federal funds do not allow for maintenance. The CEO does have a rebate fund, where REC incentives are collected, and those funds will be used to make repairs.

### **Are there federal barriers to off-site solar? (Tom F.)**

- DOA and leap are hesitant to have their funds used for a permanent project. There have been no developments that have occurred with offsite solar.

### **What happens when residents move?**

- Research shows that low income residents tend to stay in low income area.

## **V. Solar Rewards Community Presentation – Shawn Queenan**

### **Action Item: 2017 awards – sited – NEXT MEETING – update map**

- A. 2017 Standard offer will be released week of 8/28
- B. In the future all information will available to bidders in the RFP
- C. The low income RFP scoring will be updated for next year (SR Community LIRFP scoring)
  - a. PUC has communicated that they agree and are supportive to the change.

## Discussion

### **Will you be using a similar scoring for non-economic criteria next year?**

- There will not be a scoring system for non-low income folks that will be available to the public. The RFP settlement agreement will be integrated into the evaluation.
- A certain number of low income subscribers must be subscribed into the program.

### **What is the developer experience required?**

- If a developer applies without experience with solar, if they can partner or show plans with large partners that can show they follow through that is fine.

### **How the recommendations for the subgroups were integrated and taken by staff? (Grid)**

- Developers out of the 2017 RFP feedback wanted more transparency.

**Developers had issues with Bill commitment and saw problems being able to fund projects with that.**

### **Subgroup recommendation: Bidder complies with affidavit or contract...?**

#### **Options:**

- Have a third party review to see if they complied with the requirements

**Subgroup wanted to ensure the RFP would function to benefit low income customers.**

**Grid Alternatives feels that the current RFP is not serving low income customers.**

- GRID also thinks that the subgroup didn't include low income advocates and was focused on developers
- Concerned that bill reduction is weighed too little compared with job reduction. They would also like more transparency on how there will be an apples to apples comparison.

#### **DHA – (Chris Jedd)**

- Feels that RFP is much better than last year. Although there are ways to weigh things higher he feels it's "cumbersome".
- Are scores bid against each other?
- Yes they are scored with one another.
- For bill savings are you looking for an affidavit or contract that states bills will be reduced for this many years?
- How are application first viewed? Are the economic factors weighed and then the non-economic?
- No they are all scored equally in the "matrix"

**Namaste – (Heath MacKay)**

- No, not looking for a contractual obligation. This is lumped with the other commitments in the scoring group. Although there is still an expectation for them to reduce bills. But it's looked at in net bill savings.

**Microgrid – (Dan Merkle)**

**Are the points being allocated fairly in the bid?**

- That's fair, making a mathematical analysis of how points are allocated is necessary.

**If a company does not offer job training will this hinder their scoring?**

**If there are other innovative ways they are benefitting LI customers that will also be taken into consideration.**

**The company expressed interest in seeing more solar in urban settings-I feel that 15 points is communicating opposite?**

- You are correct, but there are other things you can do to make your bid more attractive.

**Grid Alternatives – (Adrienne Dorsey)**

**How is verification done here?**

- The bidders can decide how they want to be verified.

**2018 open RFP: Feels that the scoring matrix is unfair towards developers in order to understand what projects are competitive. Would like this matrix to be available? (Phone Question)**

- The evaluation criteria are plainly listed in the settlement and that's what Xcel follow in the scoring of the bid.

**What developer experience are you looking for to verify bill savings over time?**

- Developer experience is mostly weighed towards how they can do the project in the allotted time. But if you have such experience, please do submit and it will be considered.

**VI. Residential Battery Demand Response Pilot – Eric Maurer**

A. Goals

- a. The batteries here are customer owned or third party batteries.
- b. Continuing to understand batteries and find which works.
- c. Help customers understand how they can use their batteries.

- B. Pilot intent: ½ of customer battery into demand response and the other half for the customer's consumption.
- a. This option is first provided and focused on customers that already have a battery.

### **Discussion**

#### **How are you measuring the batteries output?**

- Vendor through AMI would communicate. Very similar to thermostats.

#### **Will this be used in integration with other renewable source?**

- There's more work to be done. If the batteries can be used in those cases.

C. Geo-Targeting for 2019

- a. Deploying save or switch customers in this use.
- b. All new construction projects, engage with developers and create develop efficient installs and DR systems like smart thermostats.

### **Discussion**

#### **Does local generation help?**

- You could place new generation or additional energy in the area. But Xcel will not be looking into this.

#### **Is the purpose of the pilot to roll out on a larger scale?**

- We're testing if this is an option for DSM and demand response. So if an outage occurs Xcel can use a collected load rather than shift resources. This testing is to see if geo-targeting is a viable option. The intent is yes this is a system wide project for specific projects.

#### **Do you see this as coordinating with DSP?-Jack (Xcel)**

- Yes, if the tool is viable. Cost effective and it works with DSM.

#### **Will this be used with other resources like solar?**

- Currently, we're only using DSM and DR because that's what's appropriate. But it could certainly be used for Electric vehicles, etc.

**Is concerned that this is created a silo of DSM and DR. Would like these pilots to be done in a single distribution planning process. Such as combining battery demand response as well. (WRA – Erin O.)**

## **VII. Hosting Capacity Map – Kevin Cray**

### **Discussion**

**Why the rural feeders are marked red? Are you worried about the flexibility of those meters?**

- These feeders are small. They're ability to feed to multiple PV systems is limited.

**The map doesn't identify the property level-will the map improve?**

- Yes, eventually. AMI meters will improve our insight. This will help with granularity.

**How do developers feel about the map?**

- One thing that is possible is paying a fee to see the specifics of a specific area. This is on the how to interconnect page.

**Locational net benefit analysis is being explored in Minnesota; will this be happening here in CO?**

- This being furthered developed with DSP.

**Could the necessary requirements for the interconnection be done or told in an earlier step? Or could alternatives be provided?**

- The table that we released in feeder level.
- You do have to do the interconnection application in order receive information on whether the project is viable.

## **VIII. Innovative Clean Technology (ICT) – Battery Storage – Beth Chacon**

- A. Through Younicos (battery brand) one can take a look at the real time production of a battery even if you don't control it.
  - a. Younicos is only the Panasonic battery.
- B. The Stapleton battery has a similar monitoring system.
- C. Panasonic Results
  - a. The impact on the grid is significant on this project.

D. Stapleton Results

- a. It had the ability to power all the homes in an outage.

E. Stapleton Utility-Sited Testing Results

- a. Testing for this system started in May, but results are promising

F. Lessons Learned

- a. Installers learning to respond to outages.
- b. Environmental controls

**Discussion**

**Does battery allow for more hosting capacity for solar? – (Chris Neil)**

- Yes, this does. Xcel is currently working on, in Boulder, a model to simulate an analysis for batteries on a larger scale.

**What about the 3d simulation for Panasonic? – (C. Neil)**

- The next project is Pen station. In this putting as much PV as possible and using batteries to mitigate issues with PV.

**For the Stapleton project can you use the same prioritization? – (Karey Christ-Janer)**

- No, that battery is not capable.

**Can certain customer be utilized during certain seasons? – (K. Christ-Janer)**

- Yes, that is the goal. This is something Eric is currently working on, since summer is what the current battery project is based on.

**IX. Conclusion and Wrap-Up**