

## **Future/Existing Programs and Grid Stakeholder Meeting – February 23, 2018**

|                        |                                                                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Xcel Energy            | Neil Cowan, Ryan Matley, Eric Van Orden, Kevin Cray, Stephanie Voss, Shawn Queenan, Kerry Klemm, Kristin Gaspar, Cheryl Wells, Jaclyn Webb, Craig Groeling(phone), Michael Pascucci, Jack Ihle |
| ASES                   | Carly Rixham                                                                                                                                                                                   |
| OCC                    | Chris Neil                                                                                                                                                                                     |
| CEO                    | Lyndsey Stegall, Jocelyn Durkay,                                                                                                                                                               |
| COSEIA                 | Rebecca Cantwell, John Bringenberg                                                                                                                                                             |
| Set Ventures Group     | Walter Sharp                                                                                                                                                                                   |
| Grid Alternatives      | Tom Figel, Vicky Mandell                                                                                                                                                                       |
| Independent Advocate   | Karey Christ-Janer                                                                                                                                                                             |
| WRA                    | Erin Overturf, Nathan Dunkley                                                                                                                                                                  |
| CO Army National Guard | Brett Jackson                                                                                                                                                                                  |
| City of Boulder        | Matt Lehrman                                                                                                                                                                                   |
| Microgrid Energy       | Daniel Merkle                                                                                                                                                                                  |
| Namaste Solar          | Rick Coen, Heath MacKay                                                                                                                                                                        |
| Navigant               | Stuart Schare(phone)                                                                                                                                                                           |
| EPA                    | Tim Rehder                                                                                                                                                                                     |
| SEIA                   | Sara Birmingham                                                                                                                                                                                |
| EOC                    | Jennifer Gremmert, 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.**

### **I. Welcome & Introductions**

Kevin started the meeting with introductions, and handed the floor over to Neil. Neil opened the floor with some ideas:

- Going from three stakeholder meetings, down to one.
  - “Meet with all the stakeholders before decisions have been finalized, or rate changes have been proposed” – Gilliam
  - “How about other meetings like DSM?” - Bringenberg

### **Administrative & Action Items from Last Meeting:**

- Good productive discussions – maybe have pre-filing meetings for ideas
- Next Meeting – May 18

## **II. Renewable Connect & Renewable Landing Page Update – Jackie Webb**

### **A. Program Update for 2018**

- 50 MW additional solar
- Capacity based subscriptions
- Flexible terms: monthly, 5-year, or 10-year
- RECs retired on behalf of customer

### **B. Program Timeline**

- Customer webinars- Webinars will be where commercial customers can have many of their questions answered
- Enrollment for Residential and C-class is through “My Account” (see usage then make decision)
  - • Separate form if there are multiple properties
- Program Launch
  - March 26 (tentative): Phase I, R and C class
  - May 21 (tentative): Phase II, all other customers
- System in service - 6 months of construction
  - billing begins in December

### **C. Enrollment Process**

- Phase I
  - R and C Class customers only
  - March 26, open for 8 weeks
  - Enrollment through My Account
- Phase II
  - All remaining customers
  - May 21, open for limited time
  - Enrollment through XcelEnergy.com

### **D. Robust Marketing**

- Radio (NPR and Pandora) –Social Media targeted for specific regions –Bill inserts, and emails
- No direct marketing to Windsorce customers

- Fuel credit will be decided on an annual basis based off of yearly averages

### **Discussion**

**Walter -** Will the bill credit or charge change?  
**Jaclyn -** Yes.  
**Chris Neil:** Penalty of Withdrawal?  
**Jaclyn -** \$50 residential \$100 C/I \$per KW charge for large customers  
**EOC -** What if someone goes from month to month but wants to change to year or 5 year?  
**Jaclyn -** Depends on if it is sold out.

### **E. Renewable Experience**

- Advisor tool on CO renewable landing page
- Link to renewable program comparison chart from R\*C program page
- Presentation of other program options from individual program pages

### **Discussion**

**John -** Survey questions – one seemed odd, possibly political  
“Should renewable programs be fully funded by those who participate?”  
Seems slanted towards Xcel’s programs  
**Kerry -** This is a program questioner but not Net Metering.  
**Dan Merkle -** How was the bar size decided? Savings and Time; “They seem to direct customers towards Xcel’s programs such as R\*C  
**Rick C -** Private market not be hidden....  
Maybe have the first question as “Do you need help choosing a program?”  
**Heath M. -** Where did we come up with the bar graphs? Seems to be weighted to Solar Connect.

**Rebecca (COSEIA) –** requested to have a link to list of solar developers, per settlement roughly 50% or more of the industry are COSEIA members

Landing Page is good – but the **tool/bars**

**ACTION ITEM: Subgroup - Hold a meeting within a month about the Renewable Experience.**  
The landing page is good but the tool/bar needs fixed. Can we get path of questions and how they get directed to programs? Input by middle of next week for a meeting later in the week.

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

- Eric stepped through all the dashboards.

#### **A. Net metering only Applications–**

- Pegged for 63MW, approaching 100MW
- Want month to month reporting, quarterly, cumulative? CSEIA appreciates M to M
- “Concerns for the resource planning people because allocated was 24mw and its approaching 100MW (resource planning is aware of the programs) capacity added outside of the program?”
- Too much capacity? Hard to forecast for net metering and installed capacity

Dark blue in graphs represent about 50% of total completion. Possible more cancellations from solar rewards looking to get deposit back vs net metering.

#### **Discussion**

**Rick C.** – kW and application numbers

**Eric** – kW and applications are basically the same.

**Chris Neil** – Worried about growth and resource planning.

\*\*\*Make sure Resource Planning is aware of the concern that NEM only isn't included in the ERP - only RE Plan capacity.

### **IV. Solar Rewards- Kristin Gaspar**

#### **A. Analyzing the cancellations in Q1 from 2017, analyzing 2018 and why there were cancellations?**

- No real answer, possibly looking to get deposit back? Too soon and realize it's not for them?
- Q1 had three duplicate applications from three different installers.
- 1st warning given. No changes to their user accounts at this time.
- 2nd warning reduces installer to one user license.
- during Medium program openings only
- No oddities/bug identified in system after IT review but rather user error.
- All duplicates were entered more than 1 minute apart - 1 minute rule working
- Users can check if application was accepted in user portal
- Program is staying open longer.

**Discussion**

**Brett:** What is the penalty?  
**Kristin:** \$1500 that goes to RESA (application fee)  
**Brett:** Can they use that forfeited fee for a new project?  
**Kristin:** No

**B. Medium Program New Duplicate Rule**

- We know mistakes happen. But, there are also deliberate duplications.
- Have to reserve judgement and be fair across the board.
- Slow down and make entries count.
- We are open to holding trainings before the next program opening to review best practices.
- 1:1 with installer
- Xcel hosted training (in-person or webinar)
- COSEIA member call

**Discussion**

Medium seemed to be open a lot longer – the demand is not as high as it used to be.

**Rick –** impact to the pricing was happening before the tariff change happened.

**C. Large Programs**

- **The large RFP a single customer can take all 10MW or it can be split into multiple**
  - Weighs program to one large customer? “No, fair playing field for everyone.”
  - Can large customers continue to participate? “Yes. All customers can continue to participate as long as capacity remains.”

**Discussion**

**Heath –** Can IBM participate again?  
**Xcel -** Yes  
**Sara –** 10MW of Net-Metering Only project on the report  
**Kristin –** Could be application that is hanging out there or going to be voided.

**D. Battery Interconnection Update**

- Continue to review battery design packages in greater detail prior to application submittal so that subsequent submissions of that design should have fast approval.
  - Reviewed six different design combinations so far
  - Host continual training with engineers on battery review procedures
  - Just over 10% Completed and over 60% in Final Documentation

**Discussion**

- Rick –** Is this just large scale?  
**Xcel -** Retail/Residential/Small  
**Karey –** Is there any way company can shine light on Senator Fenburg's bill?

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

**A. Subscriber participation uptick in 2017**

- Program participation grew by nearly 25%
- Average subscriber received a bill credit of \$168.87

**B. 2018 Q1 Forecast**

- 63MW planned to be interconnected by year end
- >1/3rd of 2016 RFP projects are in study or have an IA already
- 80% of 2016 Standard Offer projects have IAs signed or issued
- Many targeting Q2 and Q3 interconnections
- Program expected to double total interconnections 2018
- Release 2017 RFP, 2018 Low Income RFP, 2016 Standard Offer and other associated offerings

**C. Low-Income SR\*C RFP Bid Review**

- **Eligibility Screening**
  - Was bid submitted before the RFP closed?
  - Did it include required bid fee?
  - Were all bid forms completed?
  - Does proposed system qualify as a community solar garden?
  - Is proposed interconnection within 18 months of award?
  - Will the proposed system use approved technologies?
  - Did the bid have a REC price based on production or up-front payment?

**Discussion**

- Heath -** Standard Offer for LI?  
**Xcel -** 30 – 2017  
35 - 2018

## **VI. Product Development Update – Eric Maurer & Ryan Matley**

### **A. Future of Renewable Connect /Windsource**

- More info for willingness to pay –future of Windsource and Renewable Connect? Thoughts: Is there a way to combine the two offerings? They are fundamentally different. Cost factor issues of combining them
- Price is market based off of REC –Retired REC on their behalf –RC buying into a new resource – New or existing resources?
- Concerns with collapsing or combining-expand and create more options but don't shrink options
- What are the benefits of each program? Helping to educate customers on benefits
- Channeling resources in the Energy Outreach Colorado?
- Can we see how to quantify previous Windsource funds were allocated for wind and then how that affected the market and amount of increase in Wind energy?

### **Discussion**

- ERIN O.(WRA) -** Windsource: prior understanding that renewables cost more, outdated due to the fact that renewables have come down. No ability to offset fuel costs if you are 100%, “do gooder tax” creating more of a mix of renewables and less with one source
- OCC:** because WS has strong history - in calculation include older resources that cost us more, like Cedar Creek at \$55/MWh. Balancing resource could include batteries. Think about system as a whole, including existing renewables.
- COSEIA** thinks Windsource alternative needs to be open to competitive market
- Gilliam:** If lower renewable prices continue, community choice aggregators will come in.

### **Action Item: Q2 more of a PD Update**

**What is a cost-based resource? (Neil) What is the resting cost???**

## **VII. Hosting Capacity Resource Update – Kevin Cray**

## **VIII. Renewable Survey – Cheryl Wells**

- Cheryl gave an update on the survey results, which were overall favorable, and outlined what additional analysis will be done and presented at the next workgroup
- 70% who responded were Windsource

## **IX. M-Docket – Neil Cowan**

- QF
- ERP
- RES
- DRP

## **X. Voluntary Carbon Reduction – Eric Maurer**

- Multiple value streams – one step

### **Discussion**

**Walter –** Is there a way to get type 2 customers to participate, since they are not allowed to export?

**Eric -** Customers not on time related rate – these customers.

**Rick –** Caution – Customer-sited storage to contribute to grid, we should make sure these restrictions are software and not hardware. Trust invertors to not distribute to grid.

### **A. DR Events**

- 4 hour event
- Near-Daily Dispatch
- 10-Minute Response

### **Discussion**

**Rick -** Rate of Discharge – How are you judging that?  
**Eric –** Discounting the rate of capacity in DR program.

### **B. Vendor Eligibility**

- Deployment
- Utility experience
- Integrated API with DRMS provider
- Battery control capabilities

### **C. Next Steps**

- Rebate levels
- Size of program
- Measurement and verification plan
- Filing approach and timing

- Interconnection interactions

### **Discussion**

**Rick –** Some sort of incentive to get people to participate?

**Neil –** Think of Saver Switch, so yes.... Some sort of incentives

## **XI. Avoided CT Starts meeting Debrief – Steve Wishart/Neil Cowan**

## **XII. SPVTOU Tariff– Steve Wishart**

- Pay per peak kW
- 30 MW Cap

### **Discussion**

**Chris Neil -** Sum of their PV systems – 30 MW

- Time shifting
- Company is not in a place to lower 30% requirement(load factor)
  - Lowering to 24% would only add 6%

### **Discussion**

**John –** Result of how we approach net metering – sg demand customer – special designed rate – Xcel brought to industry. 18% customers are not served by this rate – so we are leaving out SG customer base. **Concerns** – SG rate - top to bottom opportunity to do Net-Metering, we should be looking into how to serve these customers.

**Erin –** Three Case Settlement – rather than having a rate for solar and class, but for different technologies – hoping for discussion for rate design.

**Wishart –** Buy-all, sell-all concepts.

**Wishart –** Usually done in a Phase II – TOU in Commercial use.

**ACTION – Have conversation about Rate Design for Commercial Customers – Any initial data request coming from stakeholders for next meeting.**

## **XIII. PLEXOS Modeling**

### **A. 2 Methods**

- Solar weighted marginal cost
- Hourly PLEXOS marginal cost weighted by representative solar patter

Future/Existing Programs and Grid Stakeholder Group

Meeting No. 1/Q1 2018

February 23, 2018 (9 a.m. – 1 p.m.)

- Hourly penalties removed
- QF methodology
- Solar patterns – fixed panel vs 1 axis tracking
  - Avoided solar costs
- Compare baseline PLEXOS total costs to other scenarios with incremental solar additions (50MW, 250MW, 500MW)
- Avoided fuel, VOM, purchased energy, starts, wind curtailment
- Does not address capacity credits or avoided T&D issues

### **Discussion**

**Chris Neil** – Does Solar goes on and off? – **Steve** – 15 minute increments

**ACTION – Avoided Costs – CEP 2026 what would it be without the CEP(original ERP)?  
(Rick)**

## **XIV. Wrap – Review Action Items, Future Agenda Items, Schedule Next Meeting**