Notes from the Agricultural Sector Stage 2 Subcommittee Meeting

5/13/2016

Location: Pacific Energy Center

Meeting Co-Chairs: Caroline Chen and Elsia Galawish

Facilitator: Ted Pope

Notes: Caroline Chen & Elsia Galawish

Link to meeting documents: <http://www.caeecc.org/#!blank-27/t6wpi>

*Notes: Presentations are generally not summarized in these notes. Please see presentation slides on* [*www.CAEECC.org*](http://www.CAEECC.org) *website for context. Lack of attribution for meeting participant comments is intentional by agreement of Coordinating Committee.*

# Welcome and Background – Caroline Chen & Ted Pope

* High level description of what happened (e.g., intros, logistics, etc.)

# Session-1

# [Sandra Webb & Michelle Costello/SDG&E]

* 2200 accounts only
* Some of the accounts may be served by residential accounts such as family run wineries
* Importance of water management for today’s operation
* Operators struggle to initiate projects outside of their mainline operations

**Question & Answer**

**Question**: How do you actually characterize accounts. Is this production agriculture customers? Did you include food processors? There is a disconnect between how IOUs and CEC classify accounts. Where do food processors and water utilities fit in? This group of customers do not have time to chase pennies. Uncertainty of getting incentives after taking time to engage is a big disincentive. Keeping program intervention simple is a good approach.

**Response**: We get the time commitment/attention challenge. We are looking to leverage other meetings and events that Ag industry people participate in already. Our market characterization is based on billable accounts. SDG&E included agriculture and pumping accounts. We will take a look at the possible disconnect between IOUs and CEC classifications.

**Response**: Can Farm Bureau provide feedback to SDG&E on how best to implement some of these strategies? We would like to hear from you, especially on how to reach agricultural customers with our WE&T program services. This market is hard to engage on training.

**Question**: Do you do any pump test?

**Response**: We are all struggling with pump testing due to the work paper disposition.

**Comment**: The availability of pump testing is more important than ever in California from the Farm Bureau’s perspective given new ground water rules.

**Response**: We appreciate your input.

**Comment**: We see a need for more flow-meter for growers. Are you open to incentives or financing to support flow-meters?

**Response**: Please provide more information to SDG&E on the flow-meters.

**Comment**: California provides over $20M financial assistance to water needs.

# [Shawn Fife/SCG]

* 2000 agriculture customers. If the produce is trucked to another location for processing, then that would be considered industrial activities
* 50% energy savings came from green houses, followed by farming, etc
* This sector has a small potential for energy savings as reported by the Navigant study
* AMI will allow SCG to look at usage more closely to facilitate analysis to find more cost-effective opportunities
* Selected industries such as greenhouses and vineyards share information effectively, others are very isolated and follow traditional family processes.
* Rebates may need to supported by low-or-no interest loans
* Develop industry baseline, which would be difficult
* Goal is to design a simple program that would focus on whole system optimization

**Question & Answer**

**Question**: EPIC has offered several RFPs for water energy projects, are you tracking or coordinating these activities.

**Response**: SCG Emerging Technology is looking for new but available products. We also have a new R&D group looking at new products/technologies nationwide across all sectors. We are currently working to screen these products/technologies.

**Response**: PG&E is working with teams who are submitting EPIC grants, so we are getting that new technology information.

**Comment**: The small versus large account distinction is not clear. But there is a very big difference to the access and information received by different-sized customers. The large accounts get a dedicated account rep who would offer much more support. Perhaps, the distinction should be if the account has an account rep assigned. This is a critical distinction, especially as it relates to how you get the info out to customers. For on-bill financing, have you looked at the restrictions for the crop loan? We need to make sure the utility’s finance program would not violate the restrictions of the crop loan.

**Response**: I am not familiar with the restriction with the crop loan but we (SCG) can look into that.

**Response**: At SDG&E the on-bill financing is more focused on the account’s ability to make payments and prior payment history. This on-bill financing may show up more as ongoing maintenance rather than additional debt.

# [Jarred Ross /SCE]

* Energy itself is not a primary driver for the business
* 3% of EE portfolio with 3% of portfolio savings, supported by the agriculture pump program
* We see opportunities in our mid-size account customers
* Decision to change irrigation system may change the crop’s growing behavior (i.e. almond trees)
* We need to address in-door and cannabis growers’ energy efficiency practices—this is difficult to talk about but the market is emerging. These growers may be able to incorporate EE practices
* OBF participation has been historically low for this group. Customers tend to have very short term borrowing needs. 12-month on-time payment and deposit on account are the current OBF loan requisite. These qualifying standards may need to be modified to make the OBF more accessible to the smaller farming customers
* Pump test is the primary entry for Agricultural customers into our programs

**Question & Response:**

**Comment**: Staff understands the importance of the pump testing program and we are looking at how to attribute pump testing savings. We just want to make sure the energy savings are linked to the program activities.

**Comment**: Can you talk about the incoming farmers with formal education?

**Response**: We are working with Cal Poly and others to incorporate EE into the educational program at SCE.

**Response**: This is definitely something PG&E is doing.

**Response**: SDG&E will take the feedback and will work with community college to strengthen this area. It has been hard for the customers from this sector to take time to provide feedback, but we are looking forward to more feedback.

**Question**: Has PACE been identified as a loan/financing solution?

**Response**: No, SCE has not looked at this.

# Session-2

# [Colleen Breitenstein/PG&E]

* 9600 electric and 2500 gas customers
* We want to continue successful program measures to assist customers
* We want to continue to offer technical assistance, and educate the vendors
* Over time, we may need to phase-out incentives but not to create a void. We will be working with other partners to provide services and financing offers
* We want to move to create awareness of energy usage to assist energy savings persistence
* Problem—water. Decreasing availability of measures. Customers lacks financial resources
* Would like to work on irrigation system optimization—perhaps the incentive can be offered by the water district, so PG&E can offer services. We need to work with partners. We don’t have a “back bench” of measures waiting to be deployed
* Want to increase outreach and education
* Farmers like deemed savings. Want to know what they are going to get up front. Develop a calculator to support calculated program offering but which reduces uncertainty up front
* The $100,000 cap for OBF is not enough for meaningful financing offering. PG&E is looking at on-bill repayment as option, especially to work with Ag oriented banks that already have the relationships. We need to work with the banks to explore options
* Need energy to become a “standalone” item on the P&L statement
* Research/leverage what is going on in the international arena, particularly ag in Israel

**Question**: The Water Energy Nexus calculator is really for multiple customer groups. Where will this be addressed in Agriculture?

**Response**: For embedded water savings, agriculture sector is likely to benefit the most. For example, PG&E’s water saving kit could try to incorporate the water savings. We are trying to explore this right now. We do not have a concrete answer yet.

**Response**: SDG&E agrees with PG&E.

**Response**: SCE is in the thinking stage. We need to overcome the energy cost effectiveness. We are currently exploring all possibilities so we can narrow down the options.

**Response**: SCG is working with water agencies (i.e., MWD is a SCG partner).

**Comment**: The purpose of Water calculator is to identify the benefits and fiscal responsibilities. The news is not good from the initial findings. We need to explore electric cost effectiveness. **Response**: A report has been posted.

**Facilitator comment**: PG&E expressed frustration with shortage of market characterization data. Is that an area needing more research?

**Response**: PG&E authorized additional local market characterization data needs.

**Question**: How granular a market characterization data are you asking, since we have a Navigant study available?

**Response**: PG&E needs to have more data on baseline to help us build a measure or build a program.

**Response**: PG&E needs to better understand the standard practice. We need to better understand how the customers are using their equipment (i.e., what is the standard practice for that equipment?).

**Response**: The Navigant Study was very important and valuable. But, that study was done before the drought started and more recent policy changes, an update is needed.

**Response**: PG&E needs to improve our knowledge of new ground water regulation and new methane regulatory.

**Response**: SDG&E not only needs to understand the latest standard practice, but we need to know what we can do to help this sector cost effectively.

# Q&A - General Session

**Facilitator Question**: Can Farm Bureau provide some additional thoughts for today’s discussion?

**Response**: The farm industry is very diverse and impossible to do a one-size fits all program. Most crops are also graded on the quality of production. The concern is about producing more and generating higher quality farm products. It is very difficult for the utilities to develop cookie cutter program such as HVAC/Lighting. This difference must be recognized. Water is very important.

**Facilitator Question:** Is the situation with diversity of customers on par with our discussions in the Industrial Sector SC meeting last week in that the diversity of the overall market is high and to get to customer similarity you have to drill down too many levels of sub-segments making it almost impossible to utilize benchmarking as a tool?

**Answer**: This agriculture market is very complex making it difficult for program design. The farming variables (pumping schedule, type of crop, etc.) complicate things. PG&E would like to create a custom calculation using a deemed approach.

**Comment**: What is the scope and sectors of this new calculator…is it just for Ag customers. Please clarify.

**Response**: The reason for the calculator approach is that deemed measures does not account for site variability—we have recently found that some customers might get very little savings due to soil conditions, for example. We need to calibrate our energy savings so we can provide customer information to facilitate planning, but still provide sufficient information for a deemed savings approach.

**Comment**: PG&E is still trying to figure this out. The calculator is actually not just for Ag. It includes embedded energy savings in the water. Embedded energy is a huge opportunity overall, but Ag is the biggest opportunity, so that is the focus of this calculator approach.

**Question**: What’s new potential that that realm (future ideas)?

**Response**: Measures that save water and energy. We need to modify our PG&E work papers and assumptions on existing measures to include water savings and branch into more water savings measures, such as water energy savings kits.

**Comment:** Part of the data problem with the potential studies is a lack of standard procedures.

**Comment**: I want to clarify our view that the Navigant study was important and the 1st study and it was very a good study. It’s not dated in the sense of time but the problem is that the drought and recent legislation about drought and groundwater has changed the Ag industry context and how they use water enough that the study isn’t as applicable. There are also new methane regulations that will really impact dairy operations.

**Comment**: Last year’s SDG&E market characterization study is helping SDG&E to understand the sub-sectors in Agriculture better and helping to show how to better approach the market with EE solutions.

**Comment**: Diversity in Ag is high.

**Response**: We need to figure out how to group and manage that diversity. PG&E cares about the Ag industry and they have so much at stake at this juncture. They have been talking to lots of growers to learn more about how to support them. Key considerations are: soil quality—no one size fits all, unique growing practices, quality of crops, drainage rates, evapotranspiration rates, etc. The differences have to be recognized. More attention is required on water efficiency. That is why the deemed measure calculator is so useful.

**Question**: Are you developing new deemed values or just taking inputs from users in the calculator?

**Response**: Just collecting inputs.

**Response**: I like this idea.

**Comment**: Not every measure is appropriate for similar operations depending on their site conditions and processes.

**Comment**: The Farm Bureau is aware of a Federal REAP program that serves farmers. If we all can figure out a way to align the state and federal program so these programs can be easier to access, that would help.

**Comment**: For DWR, SCG is working with a commercial site. That project is about hot-water. We hope to work with Agriculture next.

**Comment**: There is also $20B of federal money available to leverage. Trying to get Federal and State agencies to work together is just “nuts” (i.e., difficult).

**Comment**: In your presentations, I heard a lot of the same old stuff I have heard over the last 9-years. I would like to hear what are the near-term and longer-term activities. What is the time line and reality for what you are proposing over the next five years?   
**Response**: The PAs should be looking at funds through 2024. This BP is not a 5-year plan.

**Response**: So much of what we will do for the longer-term is depended on how successful we are with short-term activities.

**Response**: SCG is working on details for the implementation plan. We are looking at co-fund a program with Metro Water District. If we can co-fund a program jointly, the TRC would be better.

**Question**: Are you preparing for the cannabis opportunities? They are pretty energy intense.

**Response**: There are federal concerns here.

**Response**: We are all concerned about the legality of Cannabis. Don’t they need to adhere to the latest codes/STD rules?

**Response**: The current program budget and opportunities are pretty small. I was wondering how you would address the cannabis situation.

**Response**: We need to talk about this issue, even though it is awkward. We need to get out in front.

**Response**: The cannabis growth can sneak up in the market. The greatest challenge is to introduce EE practices to the cannabis growers.

**Response**: Similar to SCG comments, we will monitor this area as long as it is legal. This is likely to be an agriculture activity within the residential accounts.

**Facilitator question**: Will cannabis growers be addressed in BP.

**Response**: No (all PAs in agreement).

**Response**: You should not focus on the cannabis segment at the expense of all other agriculture sub-segment.

**Question**: What is the most important activity for you next year, given the challenging situation?

**Response**: For SCE to address the pump services. Leverage partners to talk about other services.

**Response**: For SCG, greenhouse moratorium, integrate water into program with IOUs and POUs.

**Response**: For PG&E, the next 12 months is the green houses moratorium, irrigation calculator, leveraging new technologies, leveraging educational institutions.

**Response**: For SDG&E, it is difficult for us to put a big effort for this sector, but we want our activities to be meaningful. The TOU is coming out next year, and we want to support this implementation. SDG&E is not approaching this market in a mass market approach (i.e., using a surgical approach).

**Question**: Did you look at the DWR report? This report is available.

**Question**: Did the water nexus team used this information in the water calculator?

**Response**: The DWR water calculator coming out of the 2007 Water Energy nexus proceeding isn’t that user friendly and many haven’t figured out how to use it.

**Written comments are due 5/25/2016.**