**California Energy Efficiency Coordinating Committee-Hosted mini-sub Underserved Working Group on SMB**

September 16, 2020 3:30-5:00pm

WebEx-Based Meeting

Draft Meeting Summary

Facilitators: Dr. Scott McCreary & Katie Abrams, CONCUR Inc.

On July 1, 2020, the CAEECC hosted the launch meeting of the Underserved Working Group (UWG or WG) via WebEx. This sub-group focuses on SMB analysis. Seven WG Members (including Leads, Proxies and Ex Officio) participated in the meeting as panelists. Three additional members of the public also participated. A full list of meeting registrants is provided in Appendix A.

Meeting materials are provided on the CAEECC website at: <https://www.caeecc.org/9-16-20-mini-sub-uwg-on-smb>

In this document, the majority of the discussion is captured without attribution. In some cases, the affiliation of the speaker is identified, because their affiliation is relevant to the comment.

For each sub-section below, key discussion points and agreements are summarized. Most conversation is captured without attribution, unless the affiliation of the speaker is relevant to the conversation.

Next Steps, at the end of this document, captures next steps discussed throughout the meeting.

**INTRODUCTIONS**

S. McCreary welcomed participants and introduced new Associate Facilitator K. Abrams. S. McCreary then welcomed participants to introduce themselves. S. McCreary then reviewed the goals and agenda for the meeting, noting that a key goal is walking through the draft work plan and reviewing the analysis approach and developing a timeline and next steps going forward.

**REVIEW OF DRAFT WORK PLAN**

Before reviewing the work plan in depth, Members discussed data privacy and access issues. It was determined that privacy is not a major issue for the participant summary data as the data is publicly available. L. Ettenson noted that the CPUC requires a data request for zip code data, but no NDA is needed.

Table 1, below, summarizes the type of data Members brainstormed would be needed, who will request it, who they will share it with, and the status. Note that it summarizes data discussed throughout the meeting, not just at the beginning of the discussion.

Table 1. Proposed Data type, sources, and status

|  |  |  |  |
| --- | --- | --- | --- |
| **Data type** | **Data Source** | **Sub WG Member requesting data** | **Status** |
| **Participant summary data** (showing customer class, total customers, and average usage by zip code; combination of Chris’s CEDARS data with data from Lara’s IOU data request of SMB program IDs)[[1]](#footnote-1) | CEDARS; IOU data request | Lara | Chris reported that Ed has access; Lara sent to Theo; Group to decide participants in data sharing and platform to use with and send via email, Google drive, or Sharepoint[[2]](#footnote-2) |
| **Participant detailed data:** above data demarking SMB | IOU data request | Lara and Chris | Chris to check whether he can get usage and # accts by zip code (EDRP process); if not Lara to draft data request, and circulate to team for review |
| **Participant detailed data:** Claims data from CEDARS (more detailed than “summary” data) | CEDARS | Chris | Ed and Theo appear to have access |
| **Participant detailed data**: Spreadsheet of zip codes and participants (publicly available on IOU sites, or more detailed if request through EDRP) | IOU Websites | Lara | Is the data accessible and does it show a breakdown across commercial categories?  |
| **Total population data to show penetration/adoption (including large commercial)**: Census data: American Community Service (by census track and zip code) and County Business Patterns[[3]](#footnote-3) | Census Bureau | n/a | UCI research team to gather |
| **NAICS codes** | https://www.naics.com/search/ | n/a | UCI research team to gather and define which codes are SMB; cross-reference w/ NAICS used in CEDARS for SMB |
| **IOU categorizations for small, medium, and large commercial** | IOUs | Lara | Completed |

*Note: Table 1 was updated based on feedback on a call with C. Malotte held September 30th.*

An outstanding question is how to share the data and with whom. Members discussed the merits of sending it all to T. Love and E. Coulson vs. creating a shared document repository for all Members to access. In post-meeting email exchange, T. Love created a Google drive repository for members and participants (and presumably the future UCI research team) to post publicly available data, review the work plan, etc. NRDC proposed that the analysis team (the UCI research team) be the primary data recipient but that data be available to UWG members by request – this can be confirmed at the next UWG.

T. Love then provided an overview of his proposed work plan. Key points and discussion are summarized here; see the document for details.

A few Members agreed that the USC analysis and report had provided a useful foundation but that we need to dive deeper for the SMB analysis to carry greater explanatory power and serve as the basis for development of concrete policy recommendations.

T. Love presented his proposed methodological overview, which includes an exploration of participation data (including explanatory variables, SMB definition), spatial analysis for gaps by geographic area, and spatial analysis for gaps by socio-demographic and geographic area.

J. Dodenhoff asked if the analysis should use CEI or claims metadata? T. Love responded that he believes CEI data is quarterly or monthly reporting data, and that therefore we are interested in claim-level data.

Members discussed whether SBUA data would be relevant, but decided that since it caps out at 20 kW, the data would not correspond to the IOU data, which varies by utility and is sometimes larger than the SBUA threshold.

Table 2, below, summarizes each IOU’s definition of small, medium, and large commercial customer class, per their 2017 Business Plan, which L. Ettenson looked up live during the meeting and followed up with K. Abrams via email. L. Ettenson also data requested SDG&E for their therms categorization, which led to further details as defined in E-4939.

Table 2. IOU definition of commercial customer classes

|  |  |  |  |
| --- | --- | --- | --- |
| **Utility** | **Small** | **Medium** | **Large** |
| SCE | <50 kW; 7,000 accounts | ≥50 kW, < 250 kW; 33,000 accounts | ≥250 kW; 478,000 accounts |
| PG&E | <40,000 kWh; <10,000 therms | 40,000-500,000 kWh; 10,000-250,000 therms | ≥500,000 kWh; ≥250,000 therms |
| SDG&E[[4]](#footnote-4) | <20 kW; <10,000 therms | 20-199 kW | >200 kW; >10,000 therms |
| SCG | <10,000 therms | 10,000-50,000 therms | >50,000 therms |
| Official adopted definition per Resolution E-4939[[5]](#footnote-5) | ≤40,000 kWh; ≤20 kW; ≤10,000 therms |  |

Given the apparent inconsistencies across IOUs and other data sources, the group may need to establish its own working definition of SMB or chose to use the officially adopted definition per Resolution E-4939. In addition, the group will need to determine an approach for reconciling various definitions of SMB (Table 2) with thresholds used in the data sources identified in Table 1 – this may need to evolve as more data is uncovered.

L. Ettenson noted that it might be possible to obtain usage and number of accounts outside of utilities. E. Coulson suggested keeping large commercial data in the analysis to enable comparison of penetration of large commercial to SMB. To that end, he suggested additional data sources from the Census Bureau (see data sources table above). Those data sources can be cross-referenced with NAICS code data to show usage by business type.

T. Love presented his proposal for key variables to structure the analysis. In summary, he proposed

* *Participation* (suggest starting with count of unique participants divided by a count of all unique accounts in that area)
* *Savings* (kWh, therms)
* *Investments* ($ incentives / count of participants; cost/kWh and therm; % of all investment going to SMB; % of cost covered by incentive)
* *Savings depth* (using overall usage and savings from potential studies on technical and achievable savings)
* *See draft work plan for additional details*

T. Love briefly discussed proposed methodologies, including cluster analysis and heat maps to prioritize participation then savings.

E. Coulson asked about program differences across IOUs and between SMB and other customer classes, and how it varies over time. T. Love noted it may be challenging to do a time series analysis, though C. Malotte affirmed time series analysis would be interesting given program changes year to year. C. Malotte explained there is not a significant difference in incentives across SMB and large commercial, although the IOUs run special direct install for the SMB sector. E. Coulson proposed that one useful metric would be response rate as function of incentive depth. E. Coulson requested samples of similar previous analysis T. Love has conducted for additional ideas of variables with explanatory power, and T. Love agreed to share examples offline with him. Some variables with explanatory power that T. Love mentioned on the call included % of cost covered by incentive and savings depth; he also suggested the appendix has additional variables to consider.

L. Ettenson explained that the scope of this inquiry is focused on IOUs and not all PAs because RENs don’t have SMB programs, and according to Alice Stover, MCE had only generated 2019 data, which would create an inconsistent data set. You can see all SMB Program IDs here (note: the public partnership program IDs were removed from the data request because of inconsistencies across utilities and also due to challenges culling only small business programs from a broader public program) :

* [PG&E's SMB programs July 2020](https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_21c87fcc7e064df1b1a51a2f585788b8.xlsx?dn=PG%26E%27s%20SMB%20programs%20July%202020.xlsx) (7.29.20)
* [SCE's SMB programs July 2020](https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_e3e144dc6c664ca29feaeb12093a40de.xlsx?dn=SCE%27s%20SMB%20programs%20July%202020.xlsx)(7.29.20)
* [SCG SMB programs July 2020](https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_ec47620a2c9a46c9b55958923fedf358.pdf)(7.29.20)
* [SDG&E SMB programs July 2020](https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_56f9a585e00e437f94dd69c783089ba5.xlsx?dn=SDG%26E%27s%20SMB%20programs%20July%202020.xlsx) (8.10.20)
* [MCE Small Commercial Implementation Plan](https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_87ca729c299544a1a8132c9d609202f1.pdf) (8.11.20)

E. Coulson explained the timeline, needs, and objectives of recruiting students. Classes commence 10/1/2020. His motivation is to bring students into the Center’s workload; he will offer them class credit to do this analysis. E. Coulson and T. Love agreed to work offline on analysis framing, then reach out to E. Coulson’s MBA and Undergraduate students to recruit students before classes start.

**TIMELINE AND NEXT STEPS**

For context on how this subgroup fits into the larger goal, L. Ettenson explained that this working group process was determined by CAEECC. She also noted that it’s important to first conduct a data analysis to determine if there is in fact a gap in service for certain customers before moving to the next phase of the project, which would look at potential recommendations about what may need to change to enable greater inclusion and equity for SMB customers. She explained the goal of this first phase is to analyze whether the group’s hypothesis about underserved customers left behind is correct. The second phase is yet to be determined as it is dependent on the data analysis.

T. Love proposed that the end of the semester (mid-December) seems like a reasonable goal, though he would like to confer with E. Coulson.

**Next steps and deadlines**

1. **Update draft work plan – by 9/30**
	1. **T. Love to upload draft work plan to google drive (done) and CAEECC to circulate the link to all subgroup Members.** [**SMB Analysis Link in Google Drive**](https://drive.google.com/drive/folders/1XDbIrv8RsrrN4vbYFqEGKQstXgqEpgQi)
	2. **Members to provide feedback by 9/30** in preparation for next UWG meeting. Reminder to technical and non-technical participants alike that the goal is to ensure the work plan moves us towards being able to provide specific recommendations about what may need to change to enable greater inclusion and equity for SMB customers.
	3. **T. Love to provide E. Coulson samples of previous analyses**
2. **Data gathering – by 10/15**
	1. **Members to confirm data sharing using the** [**SMB Analysis Link in Google Drive**](https://drive.google.com/drive/folders/1XDbIrv8RsrrN4vbYFqEGKQstXgqEpgQi)
	2. **Members to review Table 1 for specific next steps for each of the data sources** that the group concluded would be useful for the analysis
3. **Researcher recruitment – before 10/15**
	1. **E. Coulson to reach out to interested MBA and Undergraduate students to recruit** before classes start
4. **Consensus decisions – at next SMB mini-sub-UWG meeting**
	1. **Seek and confirm consensus of proposal to use definition of SMB which appears in CPUC Resolution 4939 (proposal by L. Ettenson after the meeting)**
5. **Next UWG Meeting – date TBD (likely early/mid October)**
	1. S. McCreary to include 10 minutes allocated for L. Ettenson to provide CAEECC overview next full UWG agenda
	2. CAEECC facilitation team to test for consensus on NRDC proposal that the analysis team (the UCI research team) be the primary data recipient but that data be available to UWG members by request
	3. CAEECC facilitation team to schedule next UWG meeting
	4. CAEECC facilitation team to add agenda item to obtain full UWG input on this group’s proposal and research approach

**Appendix A: Meeting Participants**

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| **CAEECC Member Organizations and Ex Officio:** |
| **Affiliation** | **Lead** |
| Anthony Kinslow II | Gemini Energy Solutions  |
| Anthony Segura | WRCOG |
| Christopher Malotte | SCE |
| Ed Coulson | UCI |
| Lara Ettenson | NRDC |
| Ted Howard | Small Business Utility Advocates |
| Theo Love | Small Business Utility Advocates, Green Energy Economics  |
| **Other Participants/Stakeholders** |
| Hal Nelson | Res-Intel |
| James Dodenhoff | Silent Running |
| Aisha Cissna | Redwood Energy Authority |

1. Note: This data doesn’t distinguish Residential from Commercial, or demarcate SMB [↑](#footnote-ref-1)
2. L. Ettenson to confirm that participant summary data sent from A. Reardon doesn’t require an NDA. Working assumption is that Cedars data does NOT include Personal Identifiable Information (PII) [↑](#footnote-ref-2)
3. J. Dodenhoff noted *“Useful have census track and/or zip code tagged by “disadvantaged community”, “low-income community”, and/or “rural community”.* Is this available through census data? [↑](#footnote-ref-3)
4. SDG&E eligibility for commercial programs is based on electrical consumption only, per contracts [↑](#footnote-ref-4)
5. The official adopted definition is as follows as adopted in Resolution E-4939: “A small business customer is defined as a non-residential customer with an annual electric usage of 40,000 kilowatt hours (kWh) or less, or an energy demand of 20 kilowatt (kW) or less, or annual consumption of 10,000 therms of gas or less. Alternatively, a small business customer is a customer who meets the definition of “micro-business” in California Government Code Section 14837 (Section 14837). Section 14837 defines a micro-business as a business, together with affiliates, that has average annual gross receipts of $3,500,000 or less over the previous three years, or is a manufacturer, as defined in Section 14837 subdivision (c), with 25 or fewer employees. The California Department of General Services is authorized to amend the gross receipt amount. In January 2010 DGS increased the gross receipt amount from $2,750,000 to the current amount of $3,500,000. (see, California Office of Administrative Law, Regulatory Action Number 2000-1110-01S.) This definition does not include fixed usage or unmetered rate schedule customers.” (Per email communication with Laurie Porter, SDG&E Contract Management Office, 9/18/2020) [↑](#footnote-ref-5)