Track 2 Working Group (T2WG) Meeting Notes Meeting 2 Tuesday, April 26, 2017 10 am to 4:00 pm DNV GL Offices 155 Grand Avenue Oakland, California 94612

These <u>draft</u> meeting notes have been distributed to T2WG participants for review and are subject to change. Final meeting notes will be posted on the T2WG web page.

Find T2WG materials at: http://t2wg.cadmusweb.com/ Email t2wg@cadmusgroup.com to join the T2WG mail list.

Attendees

See last page for the list of attendees who participated in-person or over the phone.

Action Items

Appendix B Flow Chart – Send comments, questions, suggested changes on the revised flow chart to t2wg@cadmusgroup.com	ALL (DUE Wednesday, 5/3)
	Cabariah Vinad/
	Sabarish Vinod/
	Lincus
	Halley / Mojit / Rich
Task 1 Working Document	
Task 2/3 – Specify concerns/issues/non-starters with proposed	CPUC Team
POE framework	
Task 2 POE Framework Proposal	
Task 3 – Review surveys/questionnaires from T1WG Report	ALL
T1WG Questionnaires	
Task 4 – Send questions, comments, suggestions on criteria for	ALL (DUE
Small business qualification	Wednesday, 5/3)
Task 4 Working Document	
Task 4 – Revise proposal for Small business qualification (based	Mushtaq Ahmad
on feedback from Action Item 6)	
Task 5 – Review and send comments on PG&E proposed	ALL
updates to ISP Guidance Document	
See the "Task 5 – ISP Guidance" folder on	
http://t2wg.cadmusweb.com/	
Project Data – Provide data on project count and incentives by	Jeff Hirsch
Tier and segment; Provide data on custom participation and	
savings over time	
	changes on the revised flow chart to twg@cadmusgroup.com Flow Chart Working Document (last page) – Word Doc Flow Chart Working Document (last page) – PDF Appendix B Flow Chart – Revise flow chart, integrating feedback collected during and after Meeting #2 Task 1 – Revise "Standard Baseline" recommendation (Rich send language for industrial content) Task 1 Working Document Task 2/3 – Specify concerns/issues/non-starters with proposed POE framework Task 2 POE Framework Proposal Task 3 – Review surveys/questionnaires from T1WG Report T1WG Questionnaires Task 4 – Send questions, comments, suggestions on criteria for Small business qualification Task 4 Working Document Task 4 – Revise proposal for Small business qualification (based on feedback from Action Item 6) Task 5 – Review and send comments on PG&E proposed updates to ISP Guidance Document See the "Task 5 – ISP Guidance" folder on http://t2wg.cadmusweb.com/ Project Data – Provide data on project count and incentives by Tier and segment; Provide data on custom participation and

Next Meetings

Meeting #3

Wednesday, May 10, 2017 10 a.m. – 4 p.m. Energy Resource Center (ERC), Combustion Demo Room 9240 Firestone Blvd, Downey, CA 90241

Meeting #4

Wednesday, May 24, 2017 10 a.m. – 4 p.m. SDG&E Energy Innovation Center 4760 Clairemont Mesa Blvd San Diego, CA 92117

For those unable to attend in person, we will provide a webinar and a call-in number.

Materials [http://t2wg.cadmusweb.com/]

Meeting agenda: <u>T2WG 20170426 MeetingAgenda</u>

Meeting presentation slides: <u>T2WG_20170426_MeetingPPT</u>

Other reference materials:

- DRAFT Updated Appendix B Flow Chart
- DRAFT Task 1 Code Baseline Recommendation
- DRAFT Task 2 POE Recommendation
- DRAFT Task 3 Repair Eligible/Indefinitely Recommendation
- DRAFT Task 4 Small Business Recommendation

Meeting Notes

Warmup - What is success for the working group?

- Sasha/ORA Ensure there is oversight of the process but reduce transaction time
- Ryan Chan/PGE see people make concessions; more flexibility
- Robert Guajardo/SCE close out 2 of 6 topics (small business, Task 4 and Task 1)
- Athena/SDG&E –make sure we understand the objectives of the working group and what success means; what are the metrics of success?
- Nick Brod/CLEAResult don't lose sight of customers in the process
- Josiah Adams/Ecology Action simplify regulations so small customers can do custom projects
- Keith Rothenberg/CPUC Consultant don't lose track of where the money comes from; need to protect the ratepayer interests
- Jeff Hirsch/CPUC Consultant remember we are all trying to achieve the same thing; respect everyone's perspectives; don't lose sight of why we are all here; we need to be a team
- Rich Sperberg/OnSite see some meaningful changes to the custom review process

DRAFT update to Appendix B Flow Chart (slides 4-8)

Jeff Hirsch introduced a <u>DRAFT updated Appendix B Flow Chart</u> to incorporate recent policy changes. This is an initial draft only to facilitate discussion.

Stakeholders shared feedback on further revisions:

- Flow chart helps visualize the process (Hally)
- Break up the flow chart into sections (multiple)
- The top section is the ROB or ARI the bottom half is similar to the old flow chart (Halley)
- Top half is measure-type selection and the bottom half looks like baseline selection (Ryan)
- Highlight parts of the flow chart for different paths (e.g., code baseline, POE) (multiple)
- Clarify the outcome boxes (Sasha)
- There is some iterative stuff in the flow that we need to address (Jeff Hirsch)
- Chart should be an operational chart for implementers, but may need a simplified version for policy makers (Jeff Hirsch)
- Should connect the flow chart to rest of the process, like Table 1
- Flow chart may be affected by the future discussions....
- We need a flow chart to understand/operationalize a process; we need to understand residential (SF should be a footnote); MF discussions are talking about the common areas
- Agree with the value of flow chart, simplify the chart if possible; then work through with real examples
- The interaction between the table and the flow chart will continue to need to be implemented; connect the boxes to the flow chart; e.g., click on a box to direct to the flow chart. A final outcome should have a clear mapping between the flow chart.
- The simplified pathway doesn't belong on the final chart <<follow up>>
- Flow chart is a work in progress; tasks should be overlaid on the chart

[ACTION] Stakeholders will provide additional feedback; Vinod Sabarish volunteered to update the flow chart for next meeting.

Project Data Snapshot

Jeff presented a summary of project data <u>here</u>. The data suggest that 98% of projects fall into Tier 2, so Staff cannot accept a default baseline. It's a non-starter to assume all Tier 2 projects will go direct-to-decision.

Stakeholders discussed the data including whether Staff could provide information about the breakdown of incentive \$\$ and not just project counts; also that we need to look at the data by market/segment and without residential data included.

Sasha/ORA asked for the data on incentives

Alice/SCG suggested the smaller projects may be a high percentage by count but could be a smaller percentage based on costs.

Halley/PG&E noted that one of the accomplishments of the T1WG was to decide on the 25\$k split, so he prefers not to move away from that; we have the potential to make this process better for 98% of participants if we fix this process.

Rich noted that data are only half the picture; need to remember the value – we can't just simplify the process until we see the value of what it is that we are looking at. We need to go further with the data, beyond just dividing into Tiers – need to look at how much cost is going into Tiers; we should not jump to any conclusions.

[ACTION] Jeff will provide additional custom project data to show project counts and incentive \$\$ by IOU and market.

Task 4 Discussion (Slide 9)

DRAFT Task 4 Small Business Recommendation

Purpose:

- The definition is used for the Direct-to-Decision simplified POE pathway.
- Halley/PG&E clarified the Direct to Default is not directly tied to the \$25k or the \$100k
- Anuj/SCE clarified we are not defining what a small business is; we are defining what triggers allowance to go down the small business pathway

Mushtaq/Nexant presented the proposal they developed based on feedback at first meeting. The proposal is to use total energy consumption as the criteria to define a small business. Revenues or other criteria make the process difficult to acquire customers and will increase cost of acquisition.

Stakeholder comments (not all comments captured during discussion)

- Jeff "Small business" is an entity; energy consumption based on a location. There are not the same because an entity can have multiple locations.
- Justin/AESC confirmed the proposal is per site and not per meter
- Sasha/ORA we need to get back to Jeff's comment about additional criteria
- Spencer the 250kW is average and the \$12k is extreme max; speaker clarified that the
 1.5M kWh threshold is high; most projects would be lower.
- Christie/CPUC adopting a definition of small business is not the same as adopting a path to direct-to-decision
- Jeff clarified that small business is a pathway to be eligible to direct-to-default; but
 projects still needs to go through the custom approval process; the approval to do a
 direct-to-default as a program option requires approval per program.
- Halley proposed we cast a wider net; program teams define SB differently than reps do;
 IOUs define small business differently. We want to make consistent across PAs and programs the upper end of the incentive (match the \$\$) to drive the criteria.
- Jeff energy is a useful criteria, but I want to have more criteria and allow people to
 qualify under one or more of them; I don't like energy for some things for example, a
 mom & pop business may consume little energy while plastic extrusion may consume a
 huge amount of energy; but both are small businesses

- Athena/SDG&E need to think carefully about what other criteria to consider; the data need to be objective and easily accessible; should not be difficult to get this information from the customer. The metric needs to be objective and easily collected.
- UNK To determine whether customer is small, large, etc.... should also be a one-time process; customer should only have to qualify the customer once; we are trying to make this a simple path
- Sasha/ORA reminded that Jeff had offered a broader solution; agreed with the 80/20 principle, get mostly right; asked whether Jeff was trying to expand the definition to small businesses to high energy users
- Jeff clarified yes (wants to expand the definition of small business) but thinks the energy numbers are too high.
- Mohit/NRDC suggested sector level criteria? E.g., Separate cutoff for offices and industrial; maybe just four different categories
- Josiah/Ecology Action asked for simplicity; getting through the proposed process is not feasible; implementers will walk away
- Mark/SCG when we talk about ta project with a \$2500 incentive, what is the cost to review that project? How much do we want to spend in project review? We are not making the process simpler by adding Tiers and different requirements. The easiest and most transparent criteria is energy consumption.
- Halley agreed with alternative ways to define small business (e.g., number of employees); but need to be sensitive with the criteria being "and" or "or"
- Shawn Fife/SCG would like the default to be energy since that's the data that the
 utilities have; additional data (even sq.ft.) is and additional ask and burden on the
 customer.
- Keith we should try to describe what some other areas do
- Jeff/Enovity suggested looking at all accounts in these sectors by size ...
- Leonel/CPUC Consultant seconded the use of energy instead of demand; presented proposal from a previous study:

Questions ensued about how we would operationalize this.

- Jim Kelsey/kWEng remember that the purpose of the path is the address costeffectiveness from the ratepayers
- Mohit asked whether a signed affidavit would be enough?
- Rick asked group whether energy threshold sufficient for defining small business? In general, group supported using additional criteria beyond energy used as alternatives to energy consumption threshold (e.g., "or" not "and" criteria)

- Jeff energy has to be the total consumption across all sites owned by the customer;
 cannot just be the site
- Mohit suggested skipping the "or" criteria and leaving this up to the program design
- Josiah still concerned about the subjectivity we are leaving; we are still going to have a bunch of questions that make the process uncertain and difficult; energy is by far the easiest; language barriers, etc. making collecting additional data difficult
- Ryan/PG&E would like to see default definition be energy consumption, but set some expectations on what should be defined in the program criteria.
- Kay/CPUC we should call it small consumer and not small business.

[ACTION] Stakeholders provide feedback on what criteria should be considered for this small business definition.

Task 5 ISP Guidance Document Revisions (Slides 10-17)

Keith Rothenberg presented slides on ISP Update

- Justin can there be an expedited ISP process based on reputable data; e.g. Bay Area AQMD has a standard for boilers. Can we adopt that standard instead of dealing with boilers on case by case basis? Where there are other industry standards by reference, they could apply.
- Jeff standards that people have to go by are always the floor; it's possible for standard practice to be below the standard for a period of time; usually ISP is above the floor
- Jeff the only governing language here: "For purposes of establishing a baseline for energy savings, we interpret the standard practice case as a choice that represents the typical equipment or commonly-used practice, not necessarily predominantly used practice." (D12.05.015 p 351)
- Spencer we can't do a study on every custom project and technology; how do we as implementers have an early feedback on what is ISP? We need a process where we can be reasonably sure that we have a correct ISP selection. We can't put the burden on the IOUs to do this.
- Proposal let's come up with a definition and a process outside of the study to be able to evaluate baselines. If a study doesn't exist and it doesn't trigger a study, can there be an expedited process?
- Halley Task 1 proposal has a stepped process to determine code baseline and none of those steps initiate a new ISP study. The ISP process in Task 5 is a separate process off to the side that can have its own logic structure
- Spencer what about a small project? We need a transparent, easy way that everyone understand what is ISP and why for that project.
- Keith mentioned the early project development process with PG&E.
- Athena Jeff said an ISP is intended to establish baseline, but often it rolls into whether
 or not the customer is a free-rider. We shouldn't be dinged on both baseline and freerider. The ISP is only for the purpose of establishing baseline and nothing else.
- Shawn asked about customer standard practice; Keith confirmed that CSP is included in the ISP.
- Rich the pain points of the implementer community include transparency (e.g., right now there are only 5 ISP studies published). Implementers don't know the decision-making on past ISP; don't know what is ISP on multiple markets; don't learn from the

decisions on other projects. We need to solve this transparency so we know what other decisions exist.

- The D16 solves a big portion of the D12. It used to be an interpretation that if you only
 meet ISP, it's disqualified; not now projects that meet code will qualify if its accelerated
 replacement. Jeff agreed that this was a major change in the policy and noted these
 needs to be acknowledged in the revised guide.
- Kay disagree with the CPUC approach that we should do ISP approach at the
 customer level; concerned that we are mixing ISP with NTG; suggested calculations
 should be done by IOU/implementer and not by CPUC; would like to see a regular
 schedule of measures that need to be looked at (one purpose is to sunset measures and
 we never sunset anything); should do more, major studies targeting specific sectors;
 doing ISP at the customer level is a waste of time.
- Alice agrees that customer level is not efficiency; would love to get some ISP studies
 off the ground. <what is the roadblock?>
- Stakeholders discussed more collaboration on ISP
- Jeff noted a few problems: there are 4 IOUs, CCAs and everyone wants to have separate meetings on everything; there are cases where the customer-specific ISPs; there is a transition period for later projects that needs to be worked out.

Stakeholders referenced working group lead by Tim Xu/PG&E; coordinating statewide IOU meetings on ISP to discuss lessons learned; Tim discussed some recommendations outlined in the guidance document.

Rafael/PG&E discussed ad additional paper that tries to define how you would apply the ISP concept; indicated the pain is how do you develop a standard practice for unique customers. Another concern with ISP is what do we do with the laggards (customers that have an NTG of 1)? Do we "ISP" them out of the program?

Rick asked who is particularly interested in ISP (about half of the group) and suggested an ISP subgroup.

Halley – we need to distinguish between ISP study and standard practice baseline; hopes that ISP revision talks about when to do a study.

[ACTION] Distribute two documents on ISP for stakeholder review

[ACTION] Collect opt-ins for ISP subgroup

Task 1 Clarifying Code Baseline (slide 19)

Halley presented the <u>DRAFT Task 1 Code Baseline Recommendation</u>

Changes based on previous discussions:

- Give more background about code baseline
- Note when code baseline is used and why it exists
- Created selection process to define procedure to determine standard practice baseline.

Stakeholder discussion:

Does not include BRO. Retrofit Add-on

- Need to include discussion on how to include/exclude a regressive baseline
- Determine how to include reach codes
- (front table) how do we deal with a customer who has an internal process like green goals; Halley suggests this should come out in NTG, but we need to be considerate of how policies might discourage companies from setting corporate sustainability goals; Tim – the new resolution removed the corporate goals as an impact on the POE; Mark clarified that ED still has the discretion to use this information.
- Halley the corporate sustainability goal is just a "goal" and doesn't mean they always meet it (e.g., like fitness goals)
- Jess Monn/Cascade customers may have factored these programs into the goals
- Athena we need to remove the NTG discussions from these;
- Kay agrees that motivators should belong in the NTG inquiry; NTG interviews should be used for more than determining whether the program influenced (e.g., use this opportunity to learn more about the market)
- Rich industrial customer consider the impacts on the industrial processes; look at specific language previously proposed by Rich on production and customers [ACTION] Rich will send this language to Halley
- Justin/AESC going into DEER could be opening Pandora's box
- Halley asked Jeff how we can keep this a management process? Jeff replied that it's
 not just DEER which has specific baselines for all types of equipment, but there are also
 workpapers with values; don't confuse DEER baseline assumptions with DEER
 modeling values.
- Jeff there is commission direction that when you are doing a custom measure, if there
 is a DEER method you should follow the same DEER method; Halley clarified that is
 separate from this discussion
- Jim can "do nothing" be a viable option? Jeff clarified that "do nothing" would go to existing buildings.
- Halley would like to have a standard practice baseline that doesn't require removing entire equipment and putting in new equipment.
- Spencer the implementation challenges come with the Process end-use. You need some kind of prelim design to determine viable options; we've tried to engineer multiple solutions when we already know what's going to be the winner; this puts undue burden on the customer. There could be several options but there is work to determine whether this is a viable option
- Jeff the alternative has to be less costly. Halley clarified that this is covered by the "lowest first cost" comment. Jeff says it's tricky to determine what is included in the cost. We can't ignore that there are many other costs in addition to first cost.

Jeff expressed concerns about the "viable option": We can't accept a viable option that would never occur.

- Rick asked whether "viable and reasonable" would work.
- Halley suggests we can lock this down with the trigger defined in the ISP Guidance; the trigger doesn't need to be in definition of the Standard Baseline definition.
- Mojit we need a trigger so that things get looked at and things get triggered, and noting gets stranded.

- Jeff large projects are a problem and must get treated separately. There has to be a
 trigger to say what came in isn't reasonable or viable. Nothing should be automatic, but
 we are trying to get in place policies and requirements so there are some automatic
 decisions.
- Mark need to be careful about having a catch-all; we need a clearly defined policy.
- Jeff When there isn't a code, the viable option would be to "Do nothing" or renew/replace with similar parts. There isn't a rule that says the 2nd baseline can't be the same as the first.
- Halley advocated for this in the first working group
- Jeff/Enovity do I need an ISP if my baseline is repair-indefinitely
- Keith the current ISP guidance doc does include triggers for when an ISP needs to be performed.
- Rich the consensus on this definition (for standard baseline) is dependent on the consensus of the ISP (Task 5). The key link is making sure that the ISP doc revisions are reflected and consistent here.
- Rob Can we improve by editing: "The viable option as concurred by the customer"? Halley will explore this.

[ACTION] Stakeholders provide comment, suggestion revisions on the existing Standard Baseline definition.

Lunch

Katie provided some additional information about the process after the working group: If there are controversial issues in the report, then Staff has the option to make a recommendation based on what the working group discusses, or staff could recommend a discussion in a proceeding. In this working group, there is much more active participation from staff. The intention is that T2WG stakeholders are not surprised on the end.

Task 2 Repair-Eligible/Indefinitely (slide 20) & Task 3 POE for Tier 1 & 2 (slide 21)

Jeff encourage stakeholders to read ordering paragraphs from the resolutions. The final documents must follow the scope and guidance in the resolution. If all we do to put forward the same suggestions as before, we will get hung up on the things that were not adopted.

Stakeholder discussion:

Rich asked for clarification; understands that the items weren't adopted, not because they were not reasonable, but because they were not based on consensus.

Josiah – want to build on where we were as a starting point

Jeff – The equipment condition in Tier 1 and Tier 2 is a photograph; didn't feel that a photo of the equipment was sufficient criteria; the photograph is not indicative of the equipment condition. What about past repairs? Operating data? How do we get different criteria that satisfies this requirement?

Spencer – POE by definition means, more likely than not, these criteria (equipment viability and program influence) exist

Jeff – example: a video of a pool pump is superfluous for POE

Halley commented that the photos provide proof of the baseline.

Mark – For Tier 2, can we lean on the direct-to-decision and direct-to-default (D2D), and focus the detailed discussion on Tier 1? E.g., Mom&pop businesses will not have repair records

Jeff – we are not asking for physical records

Mark – it's important to have some objectivity here; whether the items are "compelling enough" is still a subjective decision; we need to be able to manage expectations and give PAs and implementers clear direction; the risk is on the IOU/s more than others

Jeff – The resolution includes some discussion about bring evidence only in one direction; this is a fundamental issue with project documents; the resolution says the risk has to be balanced; there is no risk on the PAs.

Jesse asked how Jeff feels about D-to-D for Tier 2; Jeff said they offered D2D for small business, there would be impacts on NTG of allowing everything else to go into D2D

UNK – suggestion to allow Residential and MF to go D2D

JH – want to construct the survey to understand what influence the program \$\$ had on the decision making process; need a minimum number of questions to get at financials, maintenance, etc; there are some sample questionnaires from the back of the T1WG working group report.

Halley – Could a path forward start will full-rigor and then determine which of these we can dial back, rather than starting from scratch?

Jeff – equipment condition, photos, etc. is helpful for keeping things objective. We can show data to demonstrate operational performance; we cannot design a survey that is credible. <<how can we design a survey to get at this when we have \$\$ in one hand>>

UNK – Lower NTG is not a bad thing if we can do it cheaper. In the quest for higher NTG, we aren't getting any throughput; would take a lower NTG if I can do it cheaper.

Jim – participation numbers are declining. The framework is "guilty until proven innocent"; would like to see an adjustment in the language to reflect the cooperation of the working group. The "POE" idea puts us in the position of criminals" – need to make language more neutral.

Halley – traditional approach was to default to code, but AB802 indicates a new default. The sentiment should move beyond the "guilty until" way of discussion and focus more on "provide some evidence to show that default of existing is valid."

[ACTION] Suggestion to look at data on trends in participation and data

Josiah – affidavit idea is used in a lot of places (e.g., taxes)

Jeff – customer statement is a plausible idea, but not sure when and how to use it; taxes are audited

Kay – "affidavit" has a specific meaning in the law, don't use that specific language. What are the consequences to a specific customer?

[ACTION] Staff provide feedback on the Task 2 POE recommendation from Ecology Action; Staff define what they want to see in the recommendation

Task 6 - Streamline Custom Process (slides 23-29)

We did not review the slide during the meeting.

Rick asked for group brainstorms on the following question: What are your top three recommendations to streamline the custom process?

Stakeholders discussed in groups and reported out by table:

- Stop the telephone game; close the loop in communication.
 - Context Customers are communicating to utilities and reviewers; who then communicate with ED; etc..
- Pick a threshold below which customers can proceed with a project; consider using one
 of the existing thresholds (25, 100) OR pick a threshold (e.g., \$25k incentive) below
 which timing of incentive payments are not affected by review; and any adjustments are
 in the form of GRR
 - Context -- Customer can't proceed until they get authorization
- Set a threshold on timeliness of review (X days, weeks, months) beyond which customer can proceed with a project.
 - Context waiting many months for review/response
- Make transparent the Commission's workload of custom reviews statewide, to show workload on ED (e.g., show how many projects are in review)
- Move ISP determination to the ex post part of the process so individual projects and customers are not penalized by the absence of an ISP study (similar to prev. rec by Kay)
- Get feedback on projected time for review
 - E.g., if a project is going to take X weeks to review, we can share that expectation with customer
- Transparent, direct communication between implementers and CPUC consultants (EAR reviewers)
- Include steps/training/communication to increase the aptitude of the PA reviewers to catch issues before ED EAR
- Provide a dispute resolution mechanism for disagreement on technical aspects of a project (e.g., application of baseline), with independent party
- Provide feedback on what is done well, what to emulate; get feedback on what was looked at to come to conclusion on project disposition
 - Context: EARs only outline the negative components of a project with limited rationale
- If a project is not reviewed in a certain amount of SLA time, a project can moved forward and waived
- Implementers and EAR reviewers should be held to the same level; prevent vague comments; provide specific information with references and details
 - Context Dispositions are described with vague information. (e.g., only one line summary)
- Timely and complete submission of materials

- Context ED waits for projects for 6-9 months; received projects that don't address previous requests
- Need to understand what the intent and scope of EAR is (documented)
- Need a clear concrete definition on minimum or gold standard on what's included in project documentation

Additional comments shared after the meeting:

- Revisit the original Appendix B for what the EAR process was supposed to be for the Commission; look at original scope
 - Context original Decision that adopted EAR had a description of the parallel review process; the current process is a serial review and holds up the process
- All disposition should be shared or available in writing
 - Context sometimes implementers/customers don't get any information in writing
- Use the Ex Post evaluation team as the Dispute Resolution Process or to address oddball projects

ADJOURN - 4 PM

Meeting Participants

Full Name	Organization	Meeting 2 26-Apr
Ahmad Ganji	BASE Energy	X
Alfredo Gutierrez	SoCalREN/ICF	X
Alice Beltran	SoCal Gas	X
	SCE	X
Alok Singh		X
Anuj Desai	SCE	
Arlis Reynolds	T2WG Team (Cadmus)	X
Athena Besa	SDG&E	X
Bhaskar Vempati	CLEAResult	X
Brian Maloney	SCE	X
Briana Rogers	AESC	X (phone)
Bryan Pena	CPUC	X (phone)
Bryan Warren	SoCal Gas	X (phone)
Christina Torok	CPUC	X
David Reynolds	ERS	X (phone)
Elizabeth Baires	SoCal Gas	X
Elsia Galawish	Galawish Consulting Associates	X (phone)
Emily Shackleton	T2WG Team (Cadmus)	X
Halley Fitzpatrick	PG&E	X
James Liu	PG&EN30	X (phone)
Jeff Guild	Enovity	" X
Jeff Hirsch	CPUC Contractor (James J Hirsch & Associates)	X
Jeffrey Seto	AESC	X (phone)
Jesse Monn	Cascade Energy	X
Jim Hanna	Energy Solution	X (phone)
Jonathan Lien	SCE	X (phone)
Josiah Adams	Ecology Action	X
Justin Westmoreland	Loology Motion	X
Katherine Hardy	CPUC	X
Katie Abrams	MCE	X (phone)
Katie Wu	CPUC	X (priorie)
Katy Morsony	Energy Producers & Users Coalition	X
Keith Rothenberg	CPUC Contractor (Energy Metrics)	X
	CLEAResult	
King Lee		X (phone)
Kris Bradley	Itron	X
Leonel Campoy	Itron	X
Lisa Mau	SCE	X (phone)
Mark Reyna	SoCal Gas	X
Milena Usabiaga	Nexant	X (phone)
Mohit Chhabra	NRDC	X
Mushtaq Ahmed	Nexant	X
Nick Brod	CLEAResult	X
Peter Lai	CPUC	X
Rafael Friedmann	PG&E	X
Reggie Wilkins	SCE	X (phone)
Rich Sperberg	Onsite Energy	X
Rick Diamond	T2WG Team (LBL)	X
Robert Guajardo	SCE	X
Rod Houdyshel	SDG&E	X
Ronald Mohr	County of Los Angeles	X (phone)

Full Name	Organization	Meeting 2 26-Apr
Ryan Chan	PG&E	X
Sabarish Vinod	Lincus Energy	X
Sasha Cole	CPUC ORA	X
Scott Mitchell	SCE	X
Shahab Azizi	Lincus Energy	X (phone)
Shawn Fife	SoCal Gas	X
Spencer Lipp	Lockheed Martin	X
Tim Xu	PG&E	X
Yang Hu	CBI	X (phone)

