

**CSI Public Form
PG&E Auditorium, San Francisco
April 28, 2009**

WELCOME AND INTRODUCTIONS

CSI GENERAL UPDATE – PROGRAM OVERVIEW AND STATISTICS

No questions

CSI PROGRAM IMPROVEMENTS

Comment (McKinley Barnes): Frustrated with calculator because of its tiny print. Recommend 12-point type.

Q (McKinley Barnes): Is there a grace period to comply with the new energy efficiency requirements starting on July 1?

A (PG&E): The energy efficiency documents will be required by July 1 – that is a CEC mandate. We're working with the Commission to get the handbook and the forms approved beforehand, so we can let the industry know ahead of time and get comfortable with the new forms. There will be a transition period where we will start implementing it a month before and make it a mandate on July 1.

Comment (McKinley Barnes): On the CSI application, the Host Customers have to sign that they have read the CSI handbook. The CSI Handbook is close to 170 pages. It's great that the handbook is available to customers, but they are reluctant to sign something under the penalty of perjury that says they've read the handbook. Maybe you can say they've read the host customer portion that is applicable to them?

Comment (McKinley Barnes): If you're reorganizing the handbook, make it really clear which is the "host customer section"; instead of renaming the sections to "Program" or "Technical" sections. This will be clear to the customers which pages they need to read.

Q (SPG Solar): On Slide 16 that says Shading Measurement: Major corners not more than 40 ft apart; if I have a 1 MW single-axis tracking system with no shading, does it mean we still have to do a shading measurement at every 40 ft and turn it in? Do we need to turn in proof that there's no shade, eg. a Solmetric reading for every 40 ft of the system?

A (PG&E): I would assume that you'd use your best judgment; if you know for sure there's no shade, there's no value in looking at that.

A (CCSE): As written, the Energy Commission was trying to, in general, allow exemptions for PBI customers on some aspects of the program. We don't want to give blanket exemptions to large projects because it's difficult to do. We need to protect the industry, the customer-contractor relationship. If we give blanket exemptions, we lose the ability to educate the market that shading is important. Instead of giving blanket exemptions, we're taking advice on how to do shading for large systems.

Q (Solar Depot): This is regarding the new CEC testing requirements, especially PV modules. For example, if you have a postmarked application up to July 1 using the old equipment, is it ok? When is it ok to use equipment that meets the prior testing requirements? What happens on July 1 if you are midway in your application, how do you process that?

A (PG&E): We need to work with the CEC on this. I've just been informed that only half of the modules on the prior list are approved on the new list. There's a backlog on getting modules listed. We'll be working with the CEC on how we'll not be delaying applications based on equipment that is currently being tested.

Q (Solar Depot): What do we do with remnant equipment that won't be on the new list?

A (PG&E): For systems that have not changed their equipment since they applied, their equipment will be grandfathered in. For new applications after July 1, they'll need to be on new CEC list.

Q (Solar Depot): When is the cutoff? Do you need a reservation confirmation or just a post-marked application?

A (CCSE): This is in the handbook, related to what happens when program rules changed, eg. the calculator changes. It gives allowances for people that turn in the documents in advanced of the change, this set of rules applies to you; if you have reservations before the change, this other set of rules applies to you.

A (PG&E): We'll clarify on how we plan to deal with this: applications received vs reservation issued

A (CPUC): The industry needs to know that it's your job, not the PA's, to make sure the panels get on the list. If there's a backlog in CEC, you have to bring that up with the CEC. We can't control this.

Comment (Solar Depot): We help our customers process the paperwork. When we're not the host customer, nor the 3rd party who carries the rebate, there's no way for us to access the information even though we play

supporting role in the application. I suggest a feature is added to PowerClerk where the people who submit the paperwork, the host customer and those who carry the rebate can all see status update.

A (PG&E): We've definitely looked into that. We've heard a lot of payees who currently don't have access to the projects in the PowerClerk. This is on our list. We've identified other items that are more beneficial in the cost and efficiency perspective, so this feature is not currently on our specifications, but hopefully, we can look at it later on this year.

Q (Software Developer): Is there any integration plan between Powerclerk and the simplified calculator to allow interaction?

A (CCSE): Yes. The Powerclerk is all data fields and relationships. The Focus Group is identifying which parts of the calculator is working and which ones need to be changed; once we have a good grasp of what those are, we will take the relationships and the data fields, and incorporate them into Powerclerk. There're no proprietary calculations behind the scenes, so it's just a simple integration.

A (CPUC): On slide 32, "Itemizing necessary changes for statewide *PowerClerk* database" -- integrating the calculator reduces another piece of paperwork and will be a huge process simplification

A (PG&E): We are already in discussion with the developers of PowerClerk to let them know what we're looking at, including all the new handbook changes. Coding takes time, but we're letting the developers know ahead of time, so this should be seamless. Once the calculator is approved, the spreadsheet will only be for your reference when you're on the field; the numbers the PowerClerk spits out will be the same as what you would've gotten from the spreadsheet, except that the PowerClerk will do all the calculations in the backend. There will no additional paperwork on the calculations because everything would be imbedded in the application forms.

Q (Online submittal): When will the calculator be approved and available?

A (CCSE): We are trying to get our focus groups done within the month; we're aiming to have the advice letters filed in anticipation of rolling it out by July 1. We or the CPUC can't guarantee when and whether the advice letter will be approved, but it will happen sooner than later.

Q (Online submittal): Is it going to be on handheld as well as?

A (CCSE): It is right now only 5 sheets of paper and you can multiple those numbers independent of the Excel spreadsheet; you can have the Excel spreadsheet calculate it for you and ultimately, it PowerClerk can calculate it for

you. You should be able to do these calculations without a computer or internet connection, but it's a lot easier if you have these.

Q (CaISEIA): Can you in the future add in the PUC evaluation program, marketing & outreach and research & development activities?

A (CPUC): We will talk about evaluation later. M&O and RD&D will be on the next forum agenda.

Q (CaISEIA): In your charts, do you have any non-PV technologies submitted for rebates?

A (PG&E): 1 application for a 7kW system

A (SCE): 1 application

A (CCSE): None

Q (CaISEIA): A couple of items in the original punch list is not on your presentation: the roof penetration warranty issue; there are some contractor licenses law related to the CSI that you might want to talk about. Some contractors are interpreting the 10-year warranty of workmanship differently: some interpret it as 10-year warranty for roof penetration, some believe they're only required to provide 1 year... This creates some competitive disadvantage for those who do 10 years vs those who do only 1 year. We ask for clarification on the warranty requirements for roof penetration.

A (CCSE): Do you prefer a blanket requirement (ie. must have 10 years warranty), or let the contractors differentiate themselves on that? Right now, it looks like contractor don't like the differentiation.

A (CPUC): The language is coming in the next filing.

A (PG&E): The items on the punch list are separated by easy, medium and hard. We're moving forward with the easy ones in May. The Medium and hard ones still need feedback from the industry.

Q (CaISEIA): One new item is warranty requirements for the components vs warranty requirement from the manufacturers. It's not clear that manufacturers are required to offer a bulk warranty, including parts and labor. Now we're seeing failure of components in the field and manufacturers are not paying for the components and labor for replacing them; this is costing contractors. We need clarifications and make sure the warranty requirements are consistent between roofing and component.

Q (Verve Solar Consulting): How clean power estimator updates are tied to the CSI calculator? Is it using the same data for production? Is there a possibility to add the energy efficiency calculations, or at least related links, to the Clean Power Estimator for the CSI? The ultimate question for the consumers is how the addition of CFLs is going to affect my payback? Is the Clean Power Estimator using CSI back data?

A (CCSE): I don't know the back engine of the Clean Power Estimator. If it is running off PV Watts, then it's going to be similar to EPBB. All those calculators make predeterminations about factors such wire loss, voltage mismatch, panel types, etc . The EPBB lists those factors in the user guide. I assume Clean Power estimator also provides a list of factors it uses or allow you to make adjustments to them.

A (PG&E): Regarding the energy efficiency component, we try to make it a easy link for our customers. We much rather our customers do the energy efficiency in the beginning and rightly size their systems to the reduced load, instead of doing it after and over-sizing their systems. We want to have a similar energy efficiency tool for them.

A (CCSE): PV calculation is simple compared to energy efficiency for a specific project. The calculation for residential energy efficiency retrofit is very robust, but not user-friendly. We're working on simplifying that.

A (CPUC): The Clean Power Estimator was built under contract by the California Energy Commission before the CSI. It is a consumer decision making analysis tool, not a program tool. It is very useful, and great for the marketplace. It also has information on the CSI program built into it now, but it's really greater than the CSI program; it is funded outside of the CSI program (at least partially), and changes in the Clean Power Estimator are not in our discretion, but we can try to influence it. If the Clean Power Estimator does not already exist, we would want to create it. We haven't spent a lot of time rebuilding a consumer decision analysis tool because it already exists, but it need to think about, in the future, how to integrate that with PowerClerk.

I agree with John that we can't do exact energy efficiency measures, but we might be able to build really simple proxies. Also, we need to think about it in the context of the residential energy efficiency audit program that's coming next year from IOUs. They all filed energy efficiency plans to the CPUC that they'll have enhanced audits; how these come to reality may also influence the decision.

Q (Environmental Design Build/ Cal HERS): It's not clear whether the calculator is going to give a monthly kwh as well as TDV. What is the connection between this calculator and the New Solar Homes Partnership calculator? We are talking about the exact same inputs; the only difference is how long the building is there.

A (CCSE): The underlying calculation for the hand calculator are all based on actual runs of the NSHP calculator, so the results are very similar between hand calculator and the NSHP calculator, than they are between the EPBB calculator and the hand calculator. They are very close but not exact.

Q (Environmental Design Build/ Cal HERS): Ultimately, we should only have one calculator.

A (CPUC): We don't have control over this; it's not our program

A (PG&E): We're trying to influence the CEC to have a similar program, so it makes it easier for the solar community.

A (CCSE): Aside from calculators, there are programmatic rules that are different in the CSI than the CEC NSHP. Even if we use the same underlying calculator, we still have to change them to fit PUC decisions like design factor, rebate caps etc. Even if we use the same calculator input, they still won't spit out the same results because of program rules.

Q (Solar Tech): How are the fields in the current forms translate to the ones transferred to PowerClerk? Is there a requirements document available? Moving online requires a lot of system description, architecture, interfaces; for the hundreds of integrators who have made investments in technology, eg. software tied to CSI database & forms, if the architecture and fields from moving from the current forms/database to Powerclerk change, it will limit the adoption of the software. If requirements documents are made available, integrators can make changes to the internal system/software to prepare for that. I don't see how it relates to the Advice letter in May. For interconnection and building permit, I don't see anything that ties to the backend of permitting departments to the front end of interconnection and all the way through.

A (CCSE): Specifically on the system description worksheet, there will be less data fields; when we are taking the 10 items and fitting them into the PowerClerk, instead of the shrinking the 10 items and putting them all in the PowerClerk, we are going to be losing some of the data. We don't have a reason to collect some of the data we're losing. Right now, a lot of data exist outside of our database. Ultimately, we try to get the data into the database, so it can be sorted, reported, queried, shared, and evaluated. We're trying to identify the key fields.

Regarding integrating with other tools and quoting software, when we were building the specs, we listed 12 to 15 programs are using already, including the larger commercially available ones...

A (PG&E): We're in the process of working with software developers and solar contractors with their own tools on the changes to PowerClerk in regards to the CEC Guidelines and Advice Letter. Throughout this process up until when we expect to release this upload feature in August, we will make sure that software developers and contractors who have their own tools understand all the different fields that we are going to require at each stage, so they are ready to do that in the end of August to upload their applications into PowerClerk. It will be a process; putting information in the PowerClerk first is a key, and then we will provide webinars and classes to get people to understand all the new documents and new fields. This is all part of a roll out until the end of 2009 when we can get everything setup to go paperless and have all these software tools talk to PowerClerk.

Q (Solar Tech): Is the feedback on those requirements and data fields part of the Advice letter being completed in the next 2 weeks?

A (PG&E): The fields in PowerClerk and the upload feature are not going to be part of the Advice Letter. Let us know if there are changes in fields that are not pertinent or redundant. We can make those changes. In regards to software development, making sure the software is integrated to PowerClerk, we're working on that. We need to figure out what these fields are field first based on all these changes, then reach out to all the software developers and contractors regarding what's the required fields are, and you can structure how to do so in your software. We will give you exact fields that are required to be populated within PowerClerk.

A (PG&E): Regarding interconnection data (internal data) and permitting data (external parties with cities and counties), SCE and PG&E are identifying what the duplicative fields are to improve the data flow so we don't have to ask for the information a second time. We all have our own proprietary system for interconnection, so we have to figure out what the pieces are. Also what are the necessary documents for different municipalities and counties for permitting? Currently, there are a few groups looking at the permitting and interconnection. Permitting side is a challenge because counties and cities all want to do their own thing.

Q (Suncentric): In the data, as projects complete, could we say which incentive they got (eg. step 1-5) to show where the incentives are going into the steps?

A (CPUC): I have wanted to make the chart you're suggesting, but for customers whose rebate split across steps, that information is not easily available.

A (PG&E): The applications are itemized by steps; currently, the tool takes the average for customers who have split incentives. We can get the steps; however, if there are multiple steps -- we have projects with 3-4 steps -- we need to figure

out how to display that. In regards to a clear definition between installed vs completed: Installed= physically installed and energy generating from the system (after interconnection); completed = after system is installed and is paid or in payment.

A (CPUC): The Commission understands the differences. For the purpose of high-level quarterly reporting that I use with press and legislature, I've to keep things simple. That's why there's an emphasis on installed. We also look at completed. The completed timeframes are relevant in evaluating how our administrators are doing and how quickly the systems are being paid, but for high-level status reporting on solar in California, completed is too complicated message to convey.

Q (Suncentric): If I want to do a solar system on a house/building, but I don't want to participate in the CSI program today; after the energy efficiency requirements are in, how would I do it?

A (PG&E): That will follow our 1-step process which is applying for CSI after the system is interconnected. It still needs to comply with the energy efficiency requirements and the system sizing parameters under the program; it's just a mix of all the requirements between the reservation request process and the incentive claim all bundled in one step.

A (CCSE): As written in the handbook, people are allowed to apply for the CSI incentives within 12 months of their interconnection, they have to comply with the program requirements when they apply. The 12-month window might not always be there because it's a holdover from when the ERP program is ending. The 12-month window is likely going to shrink or disappear altogether.

- Lunch -

SINGLE-FAMILY AFFORDABLE SOLAR HOUSING

Q (Stakeholder): How do we track the status of this program? Will the applications be on the same statistics page?

A (Grid Alternatives): I think that's the goal. We're currently reporting back to the CPUC. We just gave our first quarterly update.

A (CPUC): It'll be in future progress reports and ultimately integrated with California solar statistics website. SASH is not going to be part of PowerClerk; it will have its own separate program database, but the ca solar statistics database can take data from multiple databases and merge them. That'll need to be built out; in the short term, I'll look for it in progress reports.

Q (Independent Energy Systems): What are the criteria for qualifying to this program?

A (Grid Alternatives): In the IOU territories; own the house; earn less than 80% of the area median income; considered affordable housing by PUC code, ie. a development of 2 or more units with 20% of more sold to low income family, it has to have a derestriction or covenant with the public agency to make sure it's sold at an affordable price. The difference from the standard CSI is that the rebate is not prorated based on EPBB output, but there's a minimum design correction of 95%; the house has to be basically facing south/southwest and have minimal shading to qualify.

CONTRACTING STATE LICENSING BOARD

Q (CCSE): In the database, if you can show a date when a contractor license has been suspended, that will help us.

Are you centrally located or have regional offices?

A (CSLB): Our main offices are in north and south; in the north it's in Sacramento. We have district offices in San Francisco and Santa Rosa. On the website, there's a 1800 number that can direct you to all the office locations.

GENERAL UPDATES

Q (Julia Anthony): I'm interested in the permitting cost issue. Is there a legislation going forward?

Q (CalSEIA): We're dealing with permitting one jurisdiction at a time throughout the 800 jurisdiction in California. We've got a permitting summit planned in San Jose with Solar Tech. We hope to accelerate the process. Doug and I would be reluctant to praise the Sierra Club effort because it has been somewhat isolated in technology. We hope to rectify all that that and get this going faster and sooner.

Q (Julia Anthony): Do you think legislation will do?

A (CalSEIA): No. We can talk more about this offline.

PG&E Announcement: Solar Tech and CalSEIA Summit, May 6th & 7th at eBay, San Jose. <http://www.calsolarsummit.org/>.

Comment (McKinley Barnes): Sierra Club Study is also happening in southern California. Calls and letters are going to jurisdictions with the highest fees.

Comment (Julia Anthony): In Marin County, we have gotten several jurisdictions lowered, but the process is so tedious. San Rafael is still expensive. I'm hoping that people can wield some power and get this done across the state.

OPEN QUESTIONS AND FEEDBACK

Written question: Can there be one point of contact by project? Recently, I've had one project delayed at ICF because it got lost and I could not get a hold of the project manager. With reservation requests, I have 2 project managers contacting with the same question and no call back number. It is inefficient and frustrating.

A (PG&E): All of us are looking into how we can go things better, smarter and using our staff more effectively. We'll follow-up on that. I encourage you, if you have incidences like that, to contact me at clhs@pge.com or Kristie Patterson at kmpa@pge.com.

A (SCE): SCE has a residential program manager, Andrew Long; for non-residential it's Romney Felix. We're working on a model that would have a single contact for the entire solar process, including interconnection, incentives, metering and billing. You can contact the 2 managers on issues like this, or let me know if you need more help. Robert.botkin@sce.com

Written question: Is the CPUC reviewing the Feed-in Tariffs proposal in the legislation?

A (CPUC): My part of the PUC has the responsibility on reviewing all solar-related bills that comes before the legislature. We don't review every single bill because some stop moving forward before we have a chance to review them. Maybe we should add "legislation update" in the next forum. The most relevant ones that affect CSI are one on net metering (AB 560 Skinner) and two bills related to net excess generation (SB 7 Wiggins and AB 920 Huffman).

The existing FIT program the PUC has authorized is part of the Renewable Portfolio Standard program. There are a number of bills related to FIT in the legislature and the PUC energy division has analyzed those. The CPUC legislative analysis process involves us first reviewing the bill, and then making a public version of the analysis voted on by five commissioners. The commission takes a position on the legislation: support, oppose or neutral. All of the bills related to FIT don't have public commission positions yet, so I can't state what

the CPUC position is. However, we will soon, probably at the next meeting or the one after, some might become public on Thursday. You can call our Office of Governmental Affairs (Pam Nunez and Alicia Priego), and they can get you a public memo that has the CPUC analysis and position on the bills.

Q (Sun Light and Power): What is the timeline for the VNEM implementation?

A (CPUC): Right now, the PUC is considering from the Advice Letter tariffs from the utilities; the original advice letter was suspended and supplemental advice letters that replace the originals were received last week. Protest should be coming the first week of May, if there are any. The CPUC are considering these, so they're pending.

PG&E: Once the Commission authorizes the tariff, we'll be ready to implement it. In terms of making it automated, we're spending some time and money internally on the infrastructure, so we'll be able to do so seamlessly within our billing systems. We hope this will be done by the beginning of 2010.

A (CPUC): The supplemental does replace the original advice letters that were filed in February.

Q (Solar Alliance): Are you referring to VNEM for the low income program or for the AB 2466?

A (CPUC): This is VNEM for the MASH program specifically.

Q (Stakeholder): When will the AB 2466 be approved?

A (CPUC): These tariffs have not been filed by the utilities. The utilities are planning to file those in May. Then they'll have to run their protest periods; after the protest period and the PUC approve them, the tariffs will be made available. . Look for those in the future.

Q (Environmental Design Built): Regarding HERS certification, PG&E was generous and paid for my education as a HERS rater to do PV verifications and we currently do them for the NSHP. As far as I know, the independent HERS raters are not doing the verifications for the existing buildings rebates. We're wondering about that. In connection to that, regarding sampling protocol, my understanding is how you're sampling building is different from how HERS raters would sample them out in the field. You do a random 1 out of 7. If we're doing a verification of HVAC contractors for change-outs, we're doing 1 in 7 of each installer.

A (PG&E): Under the CSI program and the CEC requirements mandate sampling of 1 in 7 for anything under 50 kW. We're thinking changing our field inspection

process. In the CEC guidebook advice letter, we are actually looking at 1 in 7 per installer, instead of 1 in 7 of everything that comes in through the door. For new solar contractors, we'll inspect the first two installations to make sure they know what the program requirements are. If everything is good, we'll keep a consistent 1 in 7 sampling for them throughout the life of the CSI program.

Q (Environmental Design Built): IOU does not allow independent HERS raters to do the inspections; I'm guessing you're using private contractors. This brings up the issue, when you have different HERS raters for NSHP, multi-family, and high rise. Some are staying out of NSHP, wait for the building to complete to do it under CSI. The CSI verification comes out of the program cost; in NSHP someone has to pay the HERS raters. This is providing an incentive to production builders to choose not to put solar on and push it onto the home owners because you've driven the cost up for us and reducing the likely for the systems to be installed.

A (PG&E): I'll follow-up with you afterwards. You've raised some good questions and issues. We'll try to make sure things are consistent to drive a sustainable solar business, to make sure the most qualified people are doing the work.

Q (Environmental Design Built): With CalHERS, we're really interested in consistency among programs, eg. the emerging solar hot water program. We're trained to do the work or we can be trained; we're already on the field all over the state. We're already so heavily relied on that we should be completely relied on instead of just piecemeal.

A (PG&E): We're already looking at some of these.

A (CalSEIA): I heard you're planning solar hot water workshop in the third quarter. There're a number of people in CalSEIA board that wants to see the solar hot water program this year, the soon the better. I want to know what the schedule is for the program implementation.

I know an evaluation report is due to the legislature on July 1. When will a draft be available and how will it be made available?

A (CPUC): The staff is working on a staff proposal on solar water heating. We had 27 calendar days since a key input for the staff proposal was made available to us. I don't have a firm date for you, but we're working on it. I'm also happy to tell you that the CPUC is not immuned to the state budget crisis. We have a hiring freeze right now. I have lost 4 staff. I have no authority to rehire right now. That's hurting our ability to help manage the CSI and solar hot water program. I hope the hiring freeze will be exempted from my section and we have appealed to our management. That does not make the June report to the legislature or the solar water heating proposal or the M&O staff proposal come any faster. We're also processing advice letters. Mona Sova is assigned the advice letter and the

program handbook changes. Amy Reardon is responsible for getting the CSI newsletters out. We're seriously working on it, but we're very short-staffed.

In terms of the June report to the legislature, it's due on June 30th. You specifically asked for whether there'll be a draft made available. I don't know that we'll have a public draft before it goes out to the legislature, but a report to legislature will have a different internal review process than our quarterly staff report. It will look a lot like a staff progress report but it'll have additional data and information in it based on the preliminary information we're getting back from our impact evaluator. There's a section of PU code that dictates what needs to be in the report. Many of the items are already in our quarterly report, but it'll have additional items statutorily required. We can talk offline about that, but I don't think there'll be any public comment or review. There'll not be surprises in the report. For example, the legislature asked us to tell them anything that needs to be changed about the program. We'll respond to that, but it's not going to be anything major. If it is, I'd expect to take public comment on it.

Comments (CalSEIA): When the program rolled out and the industry wants to give you suggestions on how to improve the program, people would say wait for the evaluation report. There is no opportunity to give you comments prior to that.

A (PUC): There will be some type of programmatic review in the CPUC rulemaking, but it will be separate from the June report to the legislature.

Q (McKinley Barnes): For SCE, the last forum I asked if we can submit the first page of the shade study instead of the entire shade study; I talked to someone there who made it happen that the tilt and azimuth are now on that main page that has the monthly averages. All the data you need is now on one page, so can we submit that instead of the 8 or 9 pages for the shade study.

In SCE territory, when a file is selected to be inspected, it goes into the category of "suspended". It puts it on my radar as if I need to do something, but instead, I just need to wait for the inspection to happen. I love it if there could be a category "to be inspected". It also makes it clear for the PAs that they are also waiting.

I've already talked to the Powerclerk people that having a separate contact is important; they're aware of that. There're so much going on, but I'm encouraging them to make that happen in the next major changes they're going to do, but they think that it would happen after that. If anyone is listening hoping the separate contact to be incorporated in the next roll-out of forms being clickable, please let them know so they'll build it in sooner.

Finally, it would be more sense for NSHP single-dwelling customers to go into the CSI program with a 18 month reservation period. It's too hard for them to go through NSHP. A CEPE/HERS has to be hired; who's going to pay that their fees. They don't even know what that fee is. It's easier for them to go through CSI. The title 24 to be done by CEPE is cumbersome. Most Title 24 docs (80-90%) are not done by CEPE in California, so customers who have done Title 24 by a non-CEPE has to have it redone by a CEPE.

A (PUC): I hear a lot about people who don't want to go through NSHP. This is not something the CSI can control. I'd like to invite the industry to provide comments to the CEC on that. The NSHP has an advisory committee, I recommend you contact every member of the NSHP advisory committee in writing and copy me and the PAs on that. We can't directly influence that, but we can coordinate with our NSHP colleagues.

A (CCSE): The SGIP program is run by SDG&E; we run the CSI. We have to coordinate in a unique fashion to make sure people aren't double-participating. We are engaged actively to make sure people are going to the appropriate program. We worked out the interconnection program with SDG&E months ago and people have enjoyed the benefits of not having to turn in interconnection paperwork with us. The information comes to us electronically from SDG&E.

Q (Regrid Power): We just added 2 more pieces of paperwork: a disclosure agreement and a commitment agreement. We might not want it to be in the application, but maybe at the backend of the energy audit. Can we have it in one single piece of paper instead of multiple pages? Our goal is to sit down with the customer, have them understand the program, and sign everything they need to sign upfront. If they see multiple pages, that can possibly curtail them from moving forward. I suggest keeping it in one page and eventually incorporate it into existing documents.

I'm an avid user of PowerClerk. There is an anomaly -- I upload all the data, but when it comes to the incentive claim step, all of a sudden there's a change: the rebate rate is not the same as the approved rate. There's no way for me to change that. I have to contact the PA. There is data in PowerClerk that is incorrect, so that's a data integrity issue. I'm hoping that these anomalies have been looked at and corrected. If not, give us the ability to go in there ourselves to make changes.

The other thing I'd like to see in PowerClerk is to be able to retrieve information for our own projects. Right now, when we want to pull data on application, it has everyone -- all installers, all system sizes, both res and non-res...

Q (CCSE): Is it just the incentive level field, or are there other fields that magically change as well?

A (Regrid Power): The other one is equipment, but we have determined that was actually a manual data entry error. However, the system is changing the rebate rate.

A (CCSE): If you have 2 arrays, you add them together to come up with one number. If you put it in PowerClerk and use the weighted design factor, that gives you something slightly different, but not exactly the same. Are you talking about that?

A (Regrid Power): It has actually been both. It has been multiple arrays and single array with no changes. You enter in the cost information, and nothing changed (not the design factor nor the annual production), but the rebate rate would drop from \$1.90 to \$1.55.

A (CCSE): We're consistently looking at data integrity issue, making sure we have correct data in PowerClerk. We will start identifying ways to navigate PowerClerk properly. One thing I've seen and we need to work on is when we get modules and inverters in there reserved, but they get deleted and not modified, it resets the whole system size. We need to make sure that whatever is confirmed doesn't get replaced. Also, when we get paperwork back, it's a little different sometimes: either someone goes into PowerClerk and didn't click the save button or something else happens. There are known issues. We are working on that to make sure whatever you put the first time is as accurate until you were to submit your incentive claim.

A (CPUC): You can get the data for your own projects. On CA solar statistics that was relaunched in January, if you go to the home page, there's a header that says "search for application". If you click on that, there's a powerful search page that lets you search off any fields. My personal favorite is to search off of San Francisco. First I start with my zip code to see which installer is installer in my neighborhood and how much they charge. You can choose zip code, installer, city... It will return an html version of the projects that meet the search criteria and you can download the Excel version of that search result. You can go in everyday to search Regrid.

The installer database that the CEC is working on is going to go live on the go solar website. That is going to have a lot of data fields about each installer that the installer will provide, including a text box for the installer to describe what they do. It also allows you to identify which counties you work in, so when people are searching for an installer available in a certain zip code, it will return those installers. When you click on that installer information, it will provide you a place to look at in the statistic information about the installer. It first displays the self-provided information by the installer, but then it will automatically link you to the

Ca solar statistics website by using the search feature. If your name is spelled correctly on the CEC database, then customers can immediately click on the statistical information about you.

A (PG&E): Some of the key fields are based on names, but it is something terrible to key off of because someone might put “inc” after a name, but some not. We’re trying to make these fields as seamless as possible, eg. linking the PowerClerk with our payment system and interconnection.

Comment (CalSEIA): All the things that have gone wrong have costs the solar companies money; think of the hundreds of hours people in this room have put in trying to figure out what these forms mean, how to fill them out correctly, how to meet the customers’ need etc. Everyday I talk to contractors who’re hurting because of the complexity of these programs.

A (CCSE): Thinking back to April of 2007, it’s a different world. Step 10 at \$0.20/Watt, there’s not going to be 50 pages of paperwork. This is an evolution. Someday, it’ll just be a checkbox that says “Yes, I would like my CSI rebate” on the interconnection application. We’re not there yet, but some day it will be as simple as that.

A (Mckinley Barnes): Can you elaborate a bit on the field verification measures? What are the requirements? Is it a check list? Do we submit something to you or just check a box that says we did it.

Another issue is if I take over from another installer, all of the equipment has to change. The CEC/CSI system size isn’t right, so when I use it to times any number, it doesn’t get the right rebate amount. I can’t change that.

A (PG&E): At this time I would suggest contacting your project manager. Initially when we built PowerClerk, we limited customers and applicant access. As we learn more about the program and simplify the program, we may open up different incentive fields. Originally, we didn’t want you to just start making up incentive rates; however, we may look for opportunities to edit things within the tool.

A (CCSE): The CEC guidelines for solar participation state clearly how they want this pursued. There are 2 ways of doing this. For multi-string, you can check your string voltages, compare them to one another and essentially state that “Yes, I checked this and that,” or “Yes, I checked that the system is installed properly”, or “Yes, I checked the open voltage”. The second verification for single string or micro inverter systems where there are just too many strings, you look at the actual output of the system, compared to the expected output of the system given the irradiance and temperature of the site at that time. As part of

the incentive claim form, we need the contractor to initial that they have verified the system either this way or that way.

Q (Mckinley Barnes): Is it the installer who actually checks that or the project manager who might meet the building inspector for the final inspection? Is there something that can be sent out to the installers or project managers?

A (CCSE): As written, the information must come to us. As a general guideline, we try not to add incremental paperwork when possible. If it turns out that we have issues with the timing of the ICF being generated after the system is installed, then obviously, they'll not sign it because the document wasn't there when they installed the system. We can work on a supplemental form or a separate form.

Q (Mckinley Barnes): If you offer a checklist that we don't have to send back to you, then I can hand it to the person who is going to be with the building inspector who signs off the building permit. That's a perfect time to check those things at the same time they're checking the shade study.

A (PG&E): Are you suggesting this be an additional form?

Q (Glenn Harris): There is an extraordinary amount MW (~21 MW) that has been carried over at SCE, where did they come from? If you look at what has been withdrawn that would've affect the program, it's only a small amount, so are we looking at a large surge of withdrawal that would affect the budget?

A (SCE): I researched that. It depends on how you're counting them. Let's talk afterwards to make sure we're talking about the same numbers. I can forward you the email response from my staff that might answer your question.

Comment (Environmental Design Build/ Cal HERS): We have a form CF6R/PV which is an installer certificate used in NSHP, which has tilt, orientation, panels, inverters, temperature, expected output and actual output, so we don't have to reinvent the wheel and create another form. Couple weeks ago, NSHP had a workshop and I raised the issue of efficiency verification and they said that they're coming up with another form. We already have all these forms and a process to document insulation levels. We have a program called "Energy Star" that verifies all that. We already have the forms and process. Rather than creating a new one for another program, let's try to stay consistent.

A (CCSE): The documentation we're referring to is based on that form. The challenge is the form is generated uniquely via the NSHP calculator; this is not the calculator that CSI uses. The information from that form is going to be put

into our program, but it has to be on a separate form that isn't generated from the NSHP calculator. For example, the output table is a unique generation, but we're using a standard output verification table.

Comment (Environmental Design Build/ Cal HERS): Our state goal is net zero energy, and we're not going to get there without systems. NSHP solar rebate is dependent on CEPEs, contactors, their subcontractors, HERS raters doing their job right. There are a lot more players. To get to our goals, we have to get on the same page.

A (PG&E): These are really good points. We could have chosen just to use the NSHP calculator and we made a conscious effort not to pursue that. However, we're using the framework NSHP calculator is based upon and made a calculator that is robust and visible to folks. We are trying to learn from each other's program. It's a consensus building process; we're involved in each other's workshops. I agree that there needs to be some consistency as best as possible, but it's a evolutionary process, a public process, making sure that all stakeholders are involved. I appreciate your comments.

Q (CARE): I was here yesterday for another proceeding and I'm very concerned that PG&E is getting into solar projects that would actually compete with the CSI, which means they are looking at projects that are under 1MW. As a ratepayer, I'm not keen on that at all. I'm wondering how the installers think. I'm concerned that different proceedings are overlapping here. How do we construct a boundary that is protective of the CSI program, which is the program that has been here the longest and aimed at consumers, as opposed to people that are going into the energy business?

A (PG&E): This is regarding PG&E's 500 MW solar program which includes 250 MW of utility-owned and 250 MW of PPA. We don't see them overlapping or in competition at all. PG&E is not interested in owning solar systems in people's roofs and competing with the CSI program.

Q (Stakeholder): I have a suggestion on field verification document; I know the CSI inspectors do have a field verification form; I've printed it out for our inspector; maybe that's something that can be looked at and modified a bit with the new guidelines.

Lastly, with the proposed CSI handbook changes, are all of these going into effect on July 1? Are there any that'll be implemented before then?

A (PG&E): The first couple slides, CEC Guideline Requirements, energy efficiency disclosure agreement, any of the energy efficiency agreements/forms, and field measurement tables are required to take into effect on July 1. Based on when the filing is going to get approved, we're going to start training before

the 7/1 mandate. Regarding to the other items we discussed, new handbook format, removing forms and removing original signatures, we're looking at filing an advice letter in mid May. We'll send out a draft to you and see if anyone protests. We want to make sure there're no known issues when we file; there's a 28 day protest period after we file, if it doesn't get protested, it gets approved. We're hoping that by mid-June, we'll have the new topics that I discussed.

A (CPUC): The PUC staff releases the program handbook once all the changes are approved. We tend to bundle multiple changes together. There are 3 pending sets of changes that will be released in the next handbook:

1. SASH is approved, but the program handbook is not yet released.
2. MASH track 2 program handbook changes. It is also approved, but handbook changes not yet released.
3. Changes based on Advice Letter filed in February. The changes are noted in Andrew's first 2 slides. That advice letter was protested. When CPUC receives a protest, we have to evaluate the protest, and potentially write a resolution for the Commission's consideration. The filers have an ability to respond to the protest; the response is due today. We don't even have the file complete on that. The protest is filed by the Division of Ratepayers Advocates (DRA) in relation to just one issue. We'll see whether we can single out that one issue and release the others. Right now, I can't tell you when that set of handbook changes can go live. Ideally, as soon as possible. I don't think the DRA will have a problem with us releasing the rest of the changes. I would look for a new handbook soon. Also, look for some type of determination with respect to what happens to that DRA protest. It's possible that the protest would be resolved by the responses today, the protest be removed, or have to go through Commission resolution which gets voted on a Commission meeting. We are not sure where that goes. We await the next round of changes which you're welcome to comment on even before the first round of issues is resolved.

Comment (Red Solar): Regarding the proposed changes, it says add identifier for 3rd party owned systems. What's the proposal?

A (PG&E): That actually is not going to be part of the advice filing. We're looking at adding that to the incentive claim form. Currently, we have quite a number of 3rd party system owners and a number of different arrangements. Within the program, it's not easily assessable to see what types of arrangements these are. As we look at measurement and evaluation data on how these systems are being financed, we want to get further clarification on whether it's a third party system owner, or a power purchase arrangement or a lease. It helps us in administrating the program better. That's not to be part of the filing; it's something we can change on the form ourselves.

Next Public Forum in San Diego on July 28