San Francisco Public Utilities Commission  
Citizens’ Advisory Committee  
Power Subcommittee  

Meeting Minutes Approved  

Tuesday, November 13, 2012  
5:30 p.m. – 7:00 p.m.  
525 Golden Gate 2nd Floor O'Shaughnessy Conference Room  

Members  
Doug Cain – Chair (D3)  
Walt Farrell (D7)  
Avni Jamdar (M-Env. Group)  
Stephen Bjorgan (M-Eng./Financial)  
Ted Ko (B-Small Business)  
M = Mayoral appointment, B = Board President appointment  

Staff: Teresa Young  

ORDER OF BUSINESS  

1. Call to order and roll call at 5:32pm when quorum was achieved.  
Present: D.Cain; W.Farrell; A.Jamdar; S.Bjorgan; T.Ko  
Absent: None  
Staff Present: Meg Meal, Jim Hendry, Teresa Young  

2. Approval of the October 2 meeting minutes  

Public Members Present: Kirk Cowgill  

4. Report from the Chair: Doug Cain  
Discussed Future agenda items – see item 7  

5. Staff report: Meg Meal  
M.Meal: We gave an update on two items: Greenhouse gas (GHG) verification report and energy efficiency benchmarking. The GHG report is done annually and given to the Air Resources Board (ARB). Third party verified and checked. We don’t have any GHG emissions that have compliance obligations required of them. The retail sales we report are the sale we make to our end use customers, don’t include the wholesale customers. On the generation/supply side, we only need to report if we have actual GHG emissions from generators or out of state.  
D.Cain: Will that come into play for the Community Choice Aggregation (CCA)?  
M.Meal: We would need to report as an energy/electricity provider, but to the extent that the CCA doesn’t own or import their resources.  
M.Meal: Barbara Hale gave update on CCA in terms of outreach and early notification on the launch of the program with updated timeline.  
M.Meal: We need to update the CCA implementation plan that will be filed with CPUC and updates for arrangement with Shell as power provider with other requirements regarding how we’re going to launch the program. That implementation report was submitted and approved by the Commission to go onto the CPUC. We also gave a presentation on the Procurement Plan.  
D.Cain: What about the benchmarking report?  
M.Meal: There was an ordinance that was passed to require all commercial buildings to be benchmarked with the amount of energy they are using. As a municipality, we helped all of the government buildings record that as one
organized report. It's set up to be able to compare where each building stands in their energy use.

A.Jamdar: Is that uploaded to the Energy Star website?
M.Meal: I'm not sure, but the concept is that we will be able to compare in some way, and I'm not sure if we report to get a rating or if it's going to a Federal-level database.

A.Jamdar: How much of the benchmarking is done?
M.Meal: The information is updated annually, there are some places in the data where we couldn’t report because the building was either under construction or we didn’t have the data, but most of it is complete. A good percentage of the inventory did not fit into the Energy Star building types because they’re odd ball things like not all muni facilities fit in, water treatment facilities, they have standard office buildings or restaurants, things that we don’t necessarily fit into. There we did other benchmarking to help provide a comparable analysis. The underlying data, I'm not sure.

S.Bjorgan: Is this the same program as the large building owners? Is it the same policy that’s not disclosed?
M.Meal: This is the same program.

D.Cain: I’d like to share about the Hestia Project. The Hestia Project was done in Seattle and Portland, which analyzed and diagrammed the cities’ entire greenhouse gas (GHG) categories. The Project captured all of the locations in the city over certain periods of time, during the day, throughout the year, and they can even see the specifics of when and where exactly energy was used. It’s all online. I have a theory that this program will become very useful and important when people start having to pay attention to energy usage. This program could be useful to the PUC in terms of having all this information organized and accessible. Money could be an issue, Seattle greatly subsidized.

6. Presentation and Discussion: Renewable Portfolio Standard (RPS) Procurement Plan to comply with California’s Renewable Energy Resources Act (link to additional background info), SFPUC Power Enterprise, Meg Meal and Jim Hendry

Discussion and Q&A:
W.Farrell: What’s the renewable energy credit (REC)?
J.Hendry: It’s going to operate with renewable resources, and with each new one you use you get new credit, each megawatt of renewable energy becomes a credit. Under new law there is a compliance obligation to meet a certain amount of credits. We can go out and buy renewable energy and renewable energy credit which becomes a bundled product. You can apply this credit to meet the compliance obligation.

W.Farrell: Does that mean you can use convention energy?
J.Hendry: You could end up buying brown energy to keep the lights on and then buying renewable energy credit to offset that

T.Ko: What is the market for that now?
M.Meal: For the REC alone, we’re seeing about $1 per REC.
T.Ko: Is this a California REC market?
M.Meal: It would be equivalent to a bucket three.
D.Cain: What is bucket three?
T.Ko: A bucket three rack is not attached to any energy anywhere. It could be a REC from out of state. One and two are RECs generated in state, generated in California’s energy system.
D.Cain: Why the bucket categorization?
M.Meal: Under RPS legislation, most entities have limits on three different types of RPS products. Most have limits on how much they can use, there are minimums and maximums. SFPUC obligations don’t have those limits
D.Cain: What were those limits?
T.Ko: One of the big fights on RPS was how much could you get from out of state, ideally we want them in state, So those limits were how much you could actually buy out of state.
A.Jamdar: For the REC, who are you buying credits from?
M.Meal: You’re buying from several counter parties, different utilities, financial institutions, brokers, etc. there’s a whole range that have these product.
D.Cain: How long has this market been around?
T.Ko: Different kinds of markets, is a better way to state it.
J.Hendry: RECs have been around since 2001. CPUC went back and forth on
how to unbundle the renewable energy around 2011 or 2010. Then this law
went into effect in 2011 and is now with bucket requirements.
W.Farrell: How do these credits function?
J.Hendry: You register with REGIS and it covers the whole western United
States. It basically gives you certificates that you report whatever you
generate. You get certificates that state how much you generated. It insures
that you only sell that renewable energy once. The RECs are tied to a real
megawatt or renewable generation and the rules are to try to make sure to sell
only once. The credit can only been taken one.
W.Farrell: If I buy many RECs, I can buy from fossil fuel generation?
A.Jamdar: If you buy the energy itself it would be double the cost.
J.Hendry: For the bucket one REC buy the energy and you buy the credit at
the same time, either in state or buy from California. There’s a preference for in
state generation to keep the jobs in state, minimize generation costs, economic
benefits, etc.
A.Jamdar: Would the credits replace the actual energy itself?
J.Hendry: No it would mostly be a combination, bundled the energy and credit
or just the credit.
W.Farrell: What’s a POU?
J.Hendry: A POU is a Publicly Owned Utility.
T.Ko: What was the limit for the amount of money for risk management?
J.Hendry: $4M set aside in an account, look at account and other
contingencies to factor.
T.Ko: So, the plan that was adopted today wasn’t specifying what the amount
was, correct?
J.Hendry: That is correct. It is no more than the money in the account but it
could also be less, we’re planning for other contingencies. The plan said to set
aside in the budget X amount of money based on forecast. 10 year forecasts
and the uncertainties, an estimate or expected dry year/shortfall and budget for
that to cover it. If it gets worse that than, we go into risk management fund. If it
gets really bad, we can use the authority under the Act and not go beyond that.
It’s a cascading projection.
T.Ko: One dollar seems really cheap
M.Meal: In the short term it’s a lot of wind?
W.Farrell: If PG&E needs to have X renewable energy by 20XX, that’s going to
raise rates eventually, correct?
J.Hendry: The CPUC is looking into that and trying to decide and models on
how much rates will go up. Their assumption going into infrastructure is due to
infrastructure needs. The rates will probably go up depending on what
happens, as you build renewable energy it will become cheaper.
W.Farrell: The price of natural gas is going down.
J.Hendry: Rates going higher than inflation than 1% a year.
T.Ko: Because of the infrastructure costs, a lot of utilities are looking at bigger
rate increases because of the aging infrastructure and replacing it.
J.Hendry: We’re small fish in the ocean. We have a cost limitation to protect
our rate payers. If things get really bad, we don’t have to comply with the Act.
The CPUC is supposed to adopt cost. That will become a safe guard and they
will have to make a policy. We are willing to pay more for renewable energy,
but only to an extent that makes sense financially. The Act says there should
be an upper limit. We might not reach the 33% goal if costs become too much.
S.Bjorgan: What’s a wet year? Is that by rainfall or snowfall? If we anticipate
climate change and figure that out we have a lot more rainfall than snowfall.
J.Hendry: We roughly think of standard deviation. It all changes over time. If
you look at the last 30 years, there’s still a good gap from where we are.
D.Cain: Have they calculated a pattern or trajectory? And what’s the impact on
generation?
M.Meal: The work that Jim and I have been doing, we’re relying on forecasted
generation looking at general hydro patterns. Whether it is rain or snow fall we
analyze the flows and take that information as to how much generation we’ll
get. We do our forecasting based on this analysis. We don’t know the answer
as to what is driving generation. That’s the question for the water folks.
D. Cain: The key question here is if any calculation is being made for climate change?
M. Meal: I’m pretty sure that primarily through Water, they do a lot of adaptation analysis and what will happen in the watershed. Most of our forecasting is about out 10 years. That actually won’t show up in our forecasting 10 years. Maybe we need to start looking beyond that.
D. Cain: How often do you review or revise your calculation?
M. Meal: I’ll have to look into that.
J. Hendry: The goal for these forecasts going out, was a little off this year. Going forward, we’ll be updating these numbers the same as the budget planning process. The water folks should feed into our numbers. We want to make sure the numbers are consistent across enterprises and budgets.
T. Ko: That could be a presentation – how we’re forecasting climate change and flows in how it affects generation.
J. Hendry: Snowpack moves or the amount of rain falls is seasonal. I know it has been talked about, not sure if it’s gotten into the water department plans. There are people in the Commission looking into this.
S. Bjorgan: Do we run generators at full capacity or just at normal load requirements? Do we have excess energy to sell?
J. Hendry: We are covered by the water first policy. We run the system to meet our water needs. The need to meet the water demands will be how much we generate. Some of this (slide 3) will go to Turlock and Modesto. We have contracts with Turlock to sell them excess power going through 2015. The amount of excess is determined by water flows.
D. Cain: By selling to the wholesale market, is that contradicting Raker Act?
J. Hendry: We have to sell it to Raker Act compliant entities.
D. Cain: When we sell and make revenue off of that, does that go back into the SFPUC fund or to power enterprise?
J. Hendry: It goes back to the SFPUC budget. We factor into the budget, a normal year of how much we sell. We have funds to go back on in case we don’t make enough in a year so that we don’t have to sell to people we’re not supposed to.
D. Cain: The reserve fund – who finances it?
J. Hendry: I’m pretty sure it’s Power, not sure.
M. Meal: It’s set through the budget process. The risk management is adopted as part of the budget every two years.
D. Cain: The Power Enterprise looks like they’re at the edge of borrowing. You have two enterprises with two separate bond authorities. Where is the money going to? That 12,000MW of Distributed Generation (DG), how is that going to impact the RPS system in general and us if we do 60MW of local generation? In other words, we’re talking about increasing our own local generation?
T. Ko: 12,000MW is a goal, not a mandate.
D. Cain: The City can generate 60MW. There’s thinking about that. Would that add to our revenue producing capabilities?
J. Hendry: I think that would go for the CCA side. This goes to the MUNI side. They’re looking at the local build out on the CCA side. There may be certain City facilities that can do that.

7. Future Agenda Items
   - Wireless controls for streetlights (3)
   - Update on green test bed program
   - Local generation program for 60MW (1)
   - Disaster Preparation for Power Enterprise
   - Power Enterprise Bonds in Future Financing
   - GHG verification report (routine report)
   - Energy Benchmarking Report for SF Municipal Buildings (2)
   - Power outages on Treasure Island – who’s going to pay for it, what’s the plan for system building
   - How are we forecasting climate change and flows in how it affects generation?
How does SFE, other agencies and the Power Enterprise work together?

8. Announcements/Comments:
The next Power Subcommittee meeting is scheduled on Tuesday, December 4, 2012.
A.Jamdar will not to be here on 12/4; T.Ko will not be here 11/20.

9. Adjournment at 6:43 p.m. T.Ko moved; S.Bjorgan seconded.