

# C/CAG

## CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

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### Resource Management and Climate Protection Committee (RMCP)

#### Minutes of August 16, 2017 Meeting

##### **In Attendance:**

Beth Bhatnagar, SSMC Board Member\*  
Deborah Gordon, Committee Chair, Woodside Town Council\*  
Ortensia Lopez, El Concilio of San Mateo County\*  
Pradeep Gupta, South San Francisco City Council\*  
Don Horsley, County Supervisor\*  
Maryann Moise Derwin, Committee Vice Chair, Mayor Portola Valley\*  
Dave Pine, County Supervisor\*  
Rick DeGolia, Town of Atherton\*  
Adrienne Carr, BAWSCA\*  
Kim Springer, County Office of Sustainability  
Ted Ko, Stem (presenter)

##### **Not in attendance:**

Diane Papan, Councilmember, San Mateo\*  
Robert Cormia, Professor Foothill-DeAnza\*  
Bill Chiang, PG&E\*  
Michael Barber, Supervisor Pine's Office

\* Committee Member (voting)

1. Introductions
2. Public Comment
3. Approval of Minutes from February 15, March 15, 2017, and June 28, 2017 meetings

Minutes passed (Lopez/Bhatnagar)

4. Presentation and update on San Mateo County Energy Watch program and new initiatives

Kim Springer delivered a short presentation on the San Mateo County Energy Watch program. The presentation has been posted on the C/CAG RMCP website.

PUBLIC NOTICING: All notices of C/CAG Board and Committee meetings are posted at:  
San Mateo County Transit District Office, 1250 San Carlos Ave., San Carlos, CA.

In reference to the Library Kits progress:

Horsley: Tagalog is prevalent in Daly City so we might want to consider that as a translation.

Springer: these is funding under Implementation, so we can do the translation.

General Comments:

Gupta: Somewhere along the lines, we need to look at how the various energy programs in the county align. SB 350 requires that the CPUC make sure that all their programs align, and PCE will need to create an integrated resource plan. It should include efficiency goals, and the effort of the SMCEW should be complimentary.

Pine: Meet with Jan Pepper and her team to make sure they know about your programs. PCE will soon be moving on to programming soon. They would benefit from knowing about all this work.

#### 5. Presentation on integration of battery storage and intelligent controls for resilience and energy-rate protection

Ted Ko, Director of Policy, from a company called Stem in Millbrae, delivered a presentation on the battery storage and software integration provided by the company.

Stem has 150 employees, and has installed hundreds of systems in over 100 locations. The presentation has been posted on the C/CAG RMCP website.

Using Lithium Ion batteries, they support “peak shaving” for their customers using a cloud-base software, which is visible to the customer. The software allows other control for the customer. Mr. Ko listed off a number of customers in San Mateo County.

Benefits can also be provided to the grid via the batteries, when not in use for peak shaving for the customers. In general, the batteries at customer sites, can be used as a virtual power plant, and feed power into the grid during grid needs. In this case, the customer can be CAISO or other IOU’s. For instance, in the heat wave about a month ago in CA, CAISO called Stem about a dozen times to pull power. At this point, it’s more a demonstration. On the other side, as CAISO demand drops, they can recharge.

Gupta: If you commit to providing power to CAISO, you can’t also provide it to your customers. How does that work?

The batteries at customer sites are not being used about 75% of the time. Therefore, Stem calls battery storage a software business, not a hardware business. Stem owns the batteries. They call it storage as a service.

Gupta: From Stem’s business perspective, storage is expensive, so how do you handle the cost of the batteries? Also, the peak curves can shift.

The shaving of the peaks and other value streams will be able to overcome the cost of the batteries. There is risk with changes in peak charges, but there are other possibilities for the business. Stem can also help with the belly of the duck curve, but they don’t have a mechanism for Stem storing, which is an increase in demand.

Gordon: You are not dependent on any particular battery storage technology?

If the storage technology allows Stem to integrate its software, the technology or chemistry doesn't matter.

Springer: Does your software do anything with building energy management systems?

Stem just announced a partnership with C-Power. They do a lot with demand response and the idea is that Stem and C-Power will approach customers together with a more integrated system. The value proposition with CCA's is that we can approach their customers to help with the local grid and energy supplier contracts, so the CCA's benefit.

Gupta: You mentioned designing your own inverters. Why?

The technical specs of a bidirectional inverter for our service needs wasn't available. We were not looking at ancillary services or reactive powers.

Springer: How do customers see the savings or benefits and given discussion we had on lease language, there is a real argument for energy efficiency and solar, is part of your model to implement this kind of programs?

Stem doesn't focus on energy efficiency, but they do work with Sunpower to install a combined system.

Pine: We need to get you connected with PCE right away.

#### 6. Bay Area Water Supply and Conservation Agency update on current water supply and conservation

Adrienne Carr presented on current water supply and conditions. The presentation has been posted on the C/CAG RMCP website.

All the reservoirs and the water bank is full for our system. Only a few aren't full, those being tied to maintenance. The rest of the reservoirs in CA are all above historical average.

Gupta: Are we looking for additional storage?

There may be some opportunities in the valley, but only after their compliance with SGMA and with the agricultural community. There is Prop 1, which has \$2.7B for these purposes, and there are 12 new reservoir projects that have applied. They will probably not hear until next June.

Pine: Are these proposals for new reservoirs or just enlargements?

There are proposals for new ones, and they will probably run into some EIR challenges. It will be the California Water Commission who will be making the selection of which projects get funded.

We had record water and snow pack years, but not the highest on water. BAWSCA water use is still tracking over 20% less than pre-drought trends.

BAWSCA is compiling a drought report that documents the drought response actions of BAWSCA and the state. The goal is get into history what transpired. There is a link in the presentation to that report.

7. Presentation about August 21, 2017 solar eclipse effect on California's solar power resources  
(Kim Springer, County staff) Presentation, Discussion

Kim Springer made a short presentation on the efforts on the part of the County on the upcoming eclipse. The presentation is posted on the C/CAG RMCP website.

The eclipse will be from 9:00 to noon on August 21, and the CPUC has sent out a few press releases to conserve energy. The County's Office of Sustainability put together a poster and some language suggesting city departments participate in reducing demand during the eclipse and learn to use less energy in the future. The poster and language has been distributed to the cities.

8. Committee Member Updates

Chair Gordon shared that Governor Brown just announced that there will be an event September 2018, near his final few months in office, on climate action. C/CAG and the County should begin a discussion with his office about, not only hosting such an event, but also presenting our accomplishments.

Lopez: We could consider also adding the work done in disadvantaged communities in San Mateo County.

Gordon: Governor Yakushev of Tyumen, has met with Governor Brown and is working on sustainability. He will be coming back in a few months for further discussions. As we start thinking about this as a global event, we should consider him as an addition. He will be visiting Stanford in October. If there are any venues that we could offer up, it would be a worthwhile opportunity.

Kim Springer shared that, starting September 5<sup>th</sup>, he would be reporting to work in Mountain View, for the next three months.

Dave Pine shared the C/CAG Water Committee met this morning and at some point, there should be some update to RMCP. There seems to be some opportunities around education and other work around water.

9. Next Regular Meeting Date: September 20, 2017