

**C/CAG**  
**CITY/COUNTY ASSOCIATION OF GOVERNMENTS**  
**OF SAN MATEO COUNTY**

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Millbrae • Pacifica • Portola Valley • Redwood City • San Bruno • San Carlos • San Mateo • San Mateo County • South San Francisco • Woodside*

**RESOURCE MANAGEMENT AND CLIMATE PROTECTION TASK FORCE**  
**Minutes from the 10-22-2014 Meeting**

**In attendance:**

Michael Barber, Supervisor Pine's office  
Beth Bhatnagar, Sustainable San Mateo County  
Adrienne Carr, BAWSCA  
Brandi de Garreaux, Town of Portola Valley  
Sapna Dixit, PG&E  
Deborah Gordon, Committee Chair, Woodside Town Council\*  
Pradeep Gupta, South San Francisco City Council\*  
Joe Herr, PG&E  
Debbie Kranefuss, Ecology Action  
Alex Palantzas, San Mateo County Hispanic Chamber of Commerce  
Kim Springer, County of San Mateo RecycleWorks (staff)  
Sandy Wong, C/CAG  
Susan Wright, County of San Mateo RecycleWorks (staff)

**Not in attendance:**

Bob Cormia, Foothill De Anza Community College  
Rick DeGolia, Town of Atherton\*  
Don Horsley, San Mateo County Board of Supervisors\*  
Jorge Jaramillo, San Mateo County Hispanic Chamber of Commerce  
Kathy Lavezzo, PG&E  
Maryann Moise Derwin, Committee Vice Chair, Portola Valley Town Council\*  
Alex Palantzas, San Mateo County Hispanic Chamber of Commerce  
Barbara Pierce, Redwood City Council\*  
Dave Pine, San Mateo County Board of Supervisors \*  
Nicole Sandkulla, BAWSCA  
Eric Sevim, A+ Japanese Auto Repair  
\*=elected official member

**1) Introductions**

Attendees introduced themselves and their organizations.

**2) Public Comment**

There was no public comment.

**3) Approval of Minutes**

The minutes from the August 27, 2014 meeting were tabled because there wasn't a quorum of committee members.

**4) Presentation on PG&E Energy Mix and Progress Toward Renewable Portfolio Standard**

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San Mateo County Transit District Office, 1250 San Carlos Ave., San Carlos, CA.

### **(Joe Herr, PG&E)**

Joe Herr explained the following points as part of his presentation:

- PG&E serves 5% of the U.S. population. 25% of all U.S. rooftop solar installations are in PG&E territory (on the customer side).
- The Renewable Energy System – Bill Credit Transfer involves exporting power to the grid. Local governments can bundle their usage across their own portfolio of facilities.
- The Renewable Portfolio Standard (RPS) only documents renewables on the utility side, not the customer side.
- Request for Offers (RFOs) are how PG&E gets new renewable projects built. There have been 156 RPS contracts totaling over 10,900 megawatts since the program began in 2002. They are dispersed throughout the state.
- Feed-in Tariff Contracts are all within California. These are smaller projects.
- RPS is for the retail sales only, which is probably 90% of all energy sales. Joe will get that total number. A bundled retail sale is the total amount of sales to PG&E customers. PG&E also has a wholesale side to the business. They provide transmission-level service. RPS is based on hours/usage, not projects.
- PG&E's electric vehicle department is growing. They renamed the department "Electric Vehicles and Electrification." Fuel switching is a reality.
- PG&E has programs that help incubate disruptive technologies like corn husks, etc. Solar came down to \$4 per watt. PG&E pays \$1,000 to \$3,000 when you install one of these technologies. Joe doesn't know as much about long-term scenario planning. Most of the projects are developed by 3<sup>rd</sup> parties, and PG&E pays for the energy.

The committee members made the following comments:

- Regarding RPS: Pradeep Gupta would like to see apples to apples – gigawatts and gigawatt hours. Also, energy efficiency should be part of the overall pie. It should be considered renewable.
- Deborah Gordon: We should take into account the amount of work accomplished for the energy spent, or "energy value." It's not "doing without," it's doing it better. That concept never comes through on these slides. It's like the miles per gallon for energy.
- Joe: MPGE is efficiency for EVs. There could be a BTU conversion.
- Pradeep: Look at labor productivity. 1 unit of electricity = what output? Right now, energy efficiency is seen as sacrificing. A lot of little things add up.
- Deborah: The cost of natural gas is going down because the United States is producing more. The incentive to do renewables used to be cost, not importing foreign oil/gas. But now we are producing our own. How does the fluctuation of the cost of natural gas change the investments in renewable energy? Joe suggested that we do a follow-up meeting about long-term procurement planning. When PG&E originally procured renewables, the prices weren't as good, but they've come down significantly.
- Adrienne Carr: The jump in GHG between 2006 and 2007 might have been because 2007 was a dry year, so PG&E couldn't get as much power from large hydro.

PG&E filed a proposal for the "Green Option" about 3 years ago. They're expecting a final decision shortly.

1<sup>st</sup> option: Individual. It will provide customers the option to go with 100% solar within PG&E territory. It will be 100% voluntary. The pool of projects will be .5 to 20 MW. It will include community solar. There will be preferential placement of projects in areas with high participation.

2<sup>nd</sup> option: Community Solar Option: .5 to 3 MW customers can buy into projects sited in their

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same community.

The proposed program will be 272 MW. This will be one of the largest community solar projects in the country.

- Deborah: That goes along with what local governments are trying to do: put solar on their own facilities to generate energy for other municipal buildings. RESBCT enables that now.

California independent system operator slide (#12)

What does a high load case look like? We are already operating in a new era of integration challenges. We have to figure out over-generation, EVs, and storage. They're working on integration through pilots and design challenges.

- Michael: Tesla is looking at the issue of batteries.
- Joe: A Sparks, NV battery plant is coming. The "ramp" on the grid is being considered. We need more flexible generation on the grid than we have today. It needs faster cycling so we can get through the ramps quickly. Generators aren't as upwardly and downward flexible. Demand response has been focused on shifting load off critical peaks. But now we're going to have over-generation during the same time. PG&E currently has rigid time frames for time of use. We will be beneficially moving energy use to when it's needed.
- Deborah: Are we getting in to micro grids? Solar works well in Arizona, but maybe not in Seattle. Are we balancing and optimizing where conditions are different in different parts of the country?
- Joe: Seattle has large hydro. In each area, demand programs are going to look different depending on the generation resource.
- Deborah: We have to look at behavior models being different in different parts of the country. We'll need different messaging.
- Pradeep: This chart (slide #12) is confusing because the scale on the left and right aren't the same. Left: Load & Net Load is 20,000MW to 46,000MW. Right: Wind & Solar is 0 to 10,000MW. PG&E is trying to optimize their investments. For local investments, is PG&E working with me, or trying to accommodate? Are we working together in spirit? What is PG&E corporate thinking?
- Joe: The chart on slide #12 is from the California Independent System Operator to highlight the issue of over-generation. Occasionally we have over-generation events now, but it will increase as we get to 2020.
- Deborah: We need to work with the business community. How can they adapt to take advantage of this, and/or completely new businesses?
- Pradeep: They could be offered incentives to change the way they do business.
- Joe: Demand Response programs interact with businesses to shift load. The scale of programs is 630MW. In comparison, community solar is ~200MW.
- Pradeep: We want to work with PG&E. PG&E has data and long term trends. We have enthusiasm and the ability to bring people together.
- Deborah: We would like to have a follow-up presentation, conversation. Maybe 3 or 4 of us would like to meet in more of a working group setting. What are the PG&E programs that are undersubscribed? How could we work together?
- Pradeep: Some homeowners associations have been exposed to solar pitches. Sometimes they're making promises about net metering. People are confused. Companies are getting their script approved by PG&E. We would like to have a spokesperson on the economics.
- Deborah: We would like to have a template for all the questions being asked. That would be really helpful.
- Kim Springer: That information could go on Energy Sage website.

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*Per the group discussion, slide #12 was removed from the Power Point file. The slide was considered problematic because the chart included two different MW scales on the Y axis. Joe Herr preferred not to perpetuate use of this chart, as it muddles an already complicated conversation around changing grid conditions.*

**5) Update on San Mateo County Energy Watch Staffing and Contracting Process (Susan Wright)**

Susan Wright showed the committee the presentation that she and Kim Springer were planning to show to the C/CAG Board at their November meeting. The committee gave the following feedback:

- Need more information about the change in GHG emissions.
- Need to include the cost of measurable action.
- Need to answer these questions: “Where would we be if we hadn’t done anything? Where do we need to go? What is the cost per kWh?”
- For the Energy Sage online solar marketplace, can there be an information section to answer questions about the efficiency of solar panels and other issues?
- What is the impact of the program on small businesses?

**6) Update on San Mateo County Sea Level Rise Planning (Michael Barber)**

Vulnerability assessment committee hosted a second meeting. The County is seeking a \$400-500k grant for larger vulnerability scoping for the coast side and bay side. The County applied for an Army Corps in-kind grant. We’re likely to get it. Dec. 4 – Coastal Conservancy meeting to find out if they get the grant. Dec. 11 – 3<sup>rd</sup> scoping meeting. By the end of next year, we’ll be the forefront of California

Finance committee is looking at how projects would get financed.

Everyone is impacted by sea level rise because we all use the wastewater treatment facilities. We hope to get a study done early next year. We’re hoping to bring people on board because resources are scattered. We’re trying to avoid each city trying to manage their own creek problems one at a time. We need to work regionally.

- Sapna Dixit: PG&E is doing a lot of work internally on adaptation. They’re doing a vulnerability analysis on substations and have a monthly internal working group. Scott Hart has been attending meetings of Silicon Valley 2.0 and staying engaged.
- Pradeep: Sea level rise is one of the new factors for the next One Bay Area plan.

**7) Update on Water Supply and Conservation Efforts in San Mateo County (Adrienne Carr)**

We’re in the driest 3-year period since 1776-1778. We are able to manage storage. 10% reductions will continue through April when we will really know the status from winter rains. If it stays dry, we’ll need to do a 20% reduction. In the county, reductions have ranged between 7% and 31%. Mid-Peninsula is getting 28% reduction.

There is a 2/3rds chance of getting a better than average wet year.

Update on drought activities:

- Running Youtube ads.

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- BAWSCA is promoting WaterSmart Software or another program to create home water use reports for customers. Only one agency has signed up so far.
- Started a rainbarrel rebate program. This has stormwater as well as water conservation benefits.
- There's interest in incentives for weather-based irrigation controllers.

8) **Committee Member Updates**

Beth Bhatnagar: Nominations for Sustainable San Mateo County's Sustainability Awards are due November 21. The release of the Indicator's Report on transportation is on November 12.

9) **Next Regular Meeting Date**

Sustainable Silicon Valley is having their WEST Summit on November 19 from noon to 6pm, so we will skip a November meeting.

The next meeting will be December 17.

**Attachments:**

None.