SACRAMENTO ENVIRONMENTAL COMMISSION

Margie Namba
Mark White
Robert Bailey
Dana Curran, Vice-Chair
George "Buzz" Link, Chair
Dr. Anthony DeRiggi
Secret Charles-Ford
Mark Barry
Richard Hunn

A JOINT COMMISSION APPOINTED BY:

County of Sacramento
City of Sacramento
City of Isleton
City of Folsom
City of Galt

MEETING MINUTES

Monday, August 18, 2014 6:00 p.m. County of Sacramento Environmental Management Department 10590 Armstrong ave., mather, ca 95655

ITEM

1. Call to Order - Chair Link

The meeting of the Sacramento Environmental Commission was called to order at 6:02 p.m.

2. Roll Call - Staff Secretary

Commissioners present: Mark White, Bob Bailey, George "Buzz" Link, Secret Charles-Ford, Mark Barry and Richard Hunn.

Commissioners absent: Margie Namba, Dana Curran, Dr. Anthony DeRiggi

3. Introduction of Commissioners – Chair Link

The Commissioners each took a turn introducing themselves.

4. Public Comment - Chair Link

There was no public comment.

5. **CONSENT ITEMS** – Approval of July 2014 Minutes

A motion to approve the July 2014 minutes was made by Mark White and seconded by Richard Hunn, amended on page 3, paragraph 5, to read that "Sacramento is the most likely city in the nation to experience a major flood disaster."

Ayes: George "Buzz" Link, Secret Charles-Ford, Mark Barry, Richard Hunn, Mark White

Noes: None

Abstain: Bob Bailey

6. Regional Cluster of Opportunity Study II- Evan Schmidt, Program Manager at Valley Vision

Ms. Evan Schmidt gave a presentation on the Regional Cluster of Opportunity Study II (RICOII), a study sponsored by a grant from the California Workforce Investment Board and California Energy Commission. A cluster is a group of businesses or industries that operate in a similar economic arena, for example clean technology or Electric Vehicle battery production. Valley Vision's role in the six organizations that share this grant is information gathering,

needs assessment and encouraging stakeholder collaboration in order to affect regional policy. Ms. Schmidt explained that Sacramento appears poised to expand rapidly in both innovation and demand in the sales of Electric Vehicles (EV's) and Waste to Energy (W2E) business.

The six organizations sharing the grant for the RICO Study II do not include any cities or counties. Commissioner Hunn asked whether these entities were included in the outreach and roundtable discussions that produced the study and Ms. Schmidt affirmed that they had been present at a few of the sessions. The SEC plans to follow up with Ms. Schmidt regarding what policies and practices are currently in place in city and county organizations that promote energy innovation and conservation and examine how it would be possible to support the effort to encourage food to fuel and electric vehicle charging stations in future developments.

Alternative renewable fuel and technology is one of the fastest growing clusters. There are 3 biodigester facilities operating in the Sacramento Region; CleanWorld, Atlas and UC Davis, with UC Davis being a leading researcher and developer of the proprietary technology. In the area of Waste to Energy, Valley Vision works with restaurants on food recycling, tracks and advocates for supportive legislation and sponsors "lunch and learns" for local fleet managers to increase education about using renewable fuels and renewable fuel vehicle technologies. UC Davis's waste to fuel facility operates at capacity while SATS operates at approximately 50% capacity. A primary way to reduce greenhouse gases coming from landfills is to divert food waste away from landfills and redirect to fuel production.

It is projected that there will be 75,000 EV's in use in Sacramento by 2025. It's estimated that there are currently 1200 vehicles and 300 charging stations being utilized in the area. Valley Vision hopes to increase the workforce and promote economic development in the EV cluster. They are outreaching to elected officials, encouraging fleet conversion to EV's, sponsoring ride and drive events, encouraging sales of EV's at local dealerships, and implementing training of electricians to install charging stations and inspectors to permit. They are also discussing EV car share programs in lower economic neighborhoods.

7. SMUD Renewables, Clean Green Technology and Energy- Jim Parks, Program Manager of Energy Efficiency and Customer Research

Mr. Parks spoke to the Commission about the Sacramento Municipal Utilities District's (SMUD) current programs and projects in the area of clean technology and energy production. SMUD is the 2nd largest muni in California and they are recognized for energy efficiency and research. SMUD's Board of Directors has adopted target goals, some of which exceed the Federal target mandates, that by 2020 all utility companies must be producing 33% renewables, achieve 15% efficiency savings and reduce greenhouse gas emissions by 90%. SMUD is currently the leader in renewable energy production in California compared to the 5 largest utilities in CA.

Renewables include wind and photovoltaic energy production. These energy sources cannot be dispatched at will but depend on environmental factors, which means that during peak usage beginning at 6 p.m., these sources of energy may not be available, which is the challenge of making renewables work for a utility company. SMUD's renewable portfolio standard is now 20% with a target of 37% in 2030. The renewable portfolio is composed mainly of biomass and biogas. The remaining percentages are comprised of solar, wind and hydro energy sources.

The Federal government has set a target for a greenhouse gas emission reduction standard of 90% by the year 2050. SMUD is selling some of their greenhouse gas emission credits on the market and using that money to invest in research to make their energy production systems cleaner. The mandate for greenhouse gas emission reductions means that fossil fuel fired plants will be shut down by 2050 to achieve these goals. The energy gap left by closing the fossil fuel plants will need to be filled with other production methods.

SMUD has begun a pumped hydro project near Placerville, CA called the lowa Hill Hydro project. The plan is to fill a small reservoir by pumping water uphill through underground shafts every night for storage and then releasing the water downhill during peak demand times for clean energy production through the same system of pipes. This is a system that can be dispatched during peak need times with a consistent energy output level. SMUD is taking core samples from around the shaft area to make sure that the geology is stable.

SMUD installed a Smart Grid pilot program at the Anatolia subdivision which includes features such as solar energy panels, energy storage capacity (batteries) and customer monitoring of PV and load. These single family homes were built to be 40% more efficient than the average home. After recent testing the actual energy efficiency is measuring about 25% more energy efficient than an average home. Net zero energy use was the target goal when the community was designed. Another program that is proving successful is SMUD's advanced lighting program. This combines efficient lighting technologies (LED, fluorescent, HID, etc.) with control strategies and the program is realizing energy savings in the range of 50-90% for businesses that implement the program. Blue Diamond Almonds retrofitted their facility lighting system with SMUD's design and reduced usage by approximately 60%.

EV potential load impact has doubled every year since 2010. SMUD offers better rates at off peak demand times

with a range of 5 cents in the middle of the night charging(off peak) from 20 cents /kw with a level 3 charger(peak demand times). There are timers on the EV chargers so that consumers can charge during off peak hours. If you had participated in the previous EV pilot program SMUD was offering they would have installed a level 2 charger at your residence and given you \$600.00 for being a part of their study, funded by a grant from the federal government.

Mr. Parks mentioned that batteries taken out of an Electric Vehicle still have 80 percent life left in them for some other use. SMUD is exploring uses for these batteries to act as energy storage in residences. There are impediments to the batteries being bundled for large capacity usage because they are all designed differently.

In August of 2013, SMUD began running 2 pilot dairy digesters in Galt, CA. Manure is transferred to a tank 26 feet deep where methane gas is produced and cleaned and sent to a generator. This produces enough energy to power 250 homes and is intended to supply energy during peak usage hours as one more possible alternative energy source.

In 2018 SMUD will be implementing tiered rates for all customers with premier rates charged at critical peak use time

8. Awards Nomination Form Committee Update- Vice Chair Curran

Mark Barry, on behalf of Vice Chair Curran, reported to the Commission that the final draft of the awards nomination form was included in the agenda packet for commissioner review. There were several suggestions to amend language in the form to be more user friendly and the form is being revised by the subcommittee.

Levels and numbers of awards were discussed as well as the categories the nominees were discussed.

9. Website Update- Dr. Anthony DeRiggi

Chair Link reported that commissioner biographies will soon be completed and available to post on the website. The SEC Guidelines to Links for Other Sites was included in the agenda packet for review and comment.

- 10. Sacramento County Environmental Management Department (EMD) Director's Report Val Siebal
- 11. Environmental News Review Vice Chair Curran

Vice Chair Curran was absent and unable to present the news articles.

12. Commissioner Comments:

It was discussed that Elk Grove may have a representative on the SEC by November or January, as the item is on the BOS agenda August 26th, to revise the SEC's ordinance to add a representative from Elk Grove.

Commissioner Link reported that he has the name of the contact at the City of Sacramento to send a letter of support to for continued grant funding for improved infrastructure for the City of Sacramento Combined Sewer System

The Commissioners made comments on the revised Awards Nomination Form and the comments are being incorporated into the final draft.

Action: The final draft will be finalized and ready for review at the September 15th meeting.

Action: Commissioners were asked to submit five topics to add to the Topic Master list by Friday, August 22, 2014. Selection for next year's topics will begin in September.

Action: Commissioner Hunn to follow up with Evan Schmidt at Valley Vision to see how the SEC could support them in influencing policies in city and county entities that promote EV and W2E advancement.

13. Adjournment – Next meeting, September 15th, 2014 at 6:00 p.m., Environmental Management Department, 10590 Armstrong Ave., Mather, CA 95655

This meeting is being audiotaped/videotaped in its entirety and will be available at the Environmental Management Department office.

Agendas are posted in the offices of the City of Sacramento, Folsom, Galt, Isleton, Rancho Cordova, Citrus Heights, Elk Grove, and the County of Sacramento and also on the EMD Website at: emd.saccounty.net. Agendas are also forwarded to interested parties upon request.