

MEETING NOTES
CALIFORNIA PV UTILITY (CPVU) MANAGERS MEETING
February 23, 2005

Introductions

On February 23rd, representatives from 11 utilities and the CPUC, convened at Anaheim Public Utilities to discuss PV program issues.

Resource sharing – on California Solar Center CPVU page
<http://www.californiasolarcenter.org/cpvu/cpvu.html>

The meeting began with attendees provided updates on their utility's renewable energy efforts.

Mariann Long, Anaheim Public Utilities provided an overview of Anaheim's RPS – 15% by 2017, goal 10% by July 2006 (Examples: solid waste from steel factory turned into power via a 3rd party power plant and buying credits from this plant qualifies for RECs).

She also reviewed new Legislation to increase rate toward Renewable Energy: including:

- **SB 107 Perata & Simitian**
http://www.leginfo.ca.gov/cgi-bin/postquery?bill_number=sb_107&sess=CUR&house=B&author=simitian
- CEC is to establish REC trading program – (WREGIS)
<http://www.westgov.org/wieb/wregis/>
<http://www.energy.ca.gov/portfolio/wregis/>
Ok to buy credits within WECC (Western Electrical Grid)
Jan 1, 2007 report required showing Muni Electric meeting RPS goals.

Leslie Brown, Silicon Valley Power (City of Santa Clara) discussed SVP's Solar Neighborhood Program – Haman School, first installation is this past year. Project was supported by Renewable Energy Credits (RECs) purchased by 3 Phases Energy. - <http://www.siliconvalleypower.com/res/?sub=neighborhoodsolar>. Fat Spaniel is monitoring the project online – <http://www.siliconvalleypower.com/res/?sub=haman>. School owns the system but SVP owns the RECs. Size = 5kW. Next year – Considering a 2\$M PV project SVP's power portfolio currently contains 26% eligible Renewable Energy, mostly small hydro (<30MW), and geothermal. Their res rates: 6.5 cents/kWh to 7.5cents/kWh; comm. Rates 8¢/kWh up to 11.5 c/kWh. ~150 MW Nat Gas power plan coming online

John Joyce, Burbank Water and Power reported that Burbank has installed in the last 6 months a 70 and 40 KW PV system
http://www.burbankwaterandpower.com/solar_panels.htm. Both projects were Self Generation Incentive Program funded
(http://www.burbankwaterandpower.com/solar_images.htm)

He noted that local building code interpretations that required disconnects on every other panel were stifling further PV installations. Local building officials based this disconnect

requirement on fire safety and fear of high voltage electrocutions if building is on fire. Recent discussions with the building Department saw the multiple disconnect rule waived to require a single disconnect, which should encourage more PV installations in the city. Burbank has hired a resource specialist to work with local schools to identify energy efficiency and renewable energy project opportunities. The city is adding a 250MW Nat Gas power plant this year. Finally, Burbank sponsors a PV rebate program: \$3/watt up to \$6000 for residential PV systems (3 systems total so far) and \$3/watt up to \$9000 for commercial PV systems.

(CMUA – Jerry Jordan – polling Muni member on what rebate level would work for different areas for PV)

Paul Reid, Azusa Power & Light, reported that they are looking at a Green Power program, hoping for Fall 05 rollout. A major new, 1200+ home development is proposed in the city's service territory with ground breaking within a month. Paul is looking at green building options and how to capture the RECs. Currently renewable energy makes up about 7-8% of their resource mix.

Mike Keese, SMUD, reported on their PV Performance Index (PI). SMUD's PI uses local weather data to estimate expected PV production and compares this estimate to the actual kWh production from PV systems found within the District. He also reported that customers wanting a SMUD PV rebates must agree to sign over the REC ownership to SMUD. Finally, he's analyzing the impact a Zero Energy Home (ZEH) subdivision scale (95-unit) has on the District's grid at a substation level.

Shannon Eddy, Renewable Advisor to the Governor's administration based at the CPUC, provided an overview of **CALIFORNIA'S SOLAR FUTURE**. Shannon's addressed recent developments on several topics, including: the state *RPS*, *RECs*, the Western Governor's Clean Energy Initiative, and the Governor's Solar Million Solar Roofs Initiative.

RPS

Shannon began by reviewing the State RPS. The RPS was passed in 2002 (SB 1078) http://www.leginfo.ca.gov/pub/01-02/bill/sen/sb_1051-1100/sb_1078_bill_20020912_chaptered.pdf

SDG&E and PG&E went out to bid for renewable energy project last year. Results just come in: 6.5 cents/kWh for baseline RE and 11.4 cents/kWh for peaking RE. Any bids that come in above these rates are subsidized by CEC Renewables program <http://www.energy.ca.gov/portfolio/index.html>. Contracts expected to be in place 2nd or 3rd qtr 2005, approximately 710 GWh for PG&E and ___ GWh – SDG&E. SCE has been dragging their feet, though they are currently at 18% RE, and expect bids in March 05.

DG REC ownership – The CPUC is deciding on REC ownership but there is no firm decision date.

The PUC is reviewing how the RPS will be implemented, most likely in phases:

- Phase 1 – flexibility in delivery. I.e. Doesn't have to be delivered in territory
- Phase 2 –

- Phase 3 – WECC trading – sensitive to keeping focus on California to encourage construction in CA.

The PUC is also looking to expand transmission system to capture new Tehachapi wind projects slated for completion in June. Key issue that needs to be resolved is how to pay for transmission? For example, the PUC is looking at a Carbon adder fee of 8-25\$/ton of Carbon based on other states' experience, such as Idaho. RPS may apply statewide in new iteration: 20% by 2017. She noted that SB 107 is **not** the administration's bill, although the Governor wants to accelerate RPS to 20% by 2010.

Western Governor's Initiative – Clean Energy http://www.westgov.org/wga_energy.htm

Shannon then reviewed the Western Governors' Clean Energy Initiative. She reported that an estimated 30,000 MW of RE would be coming online by 2015, including "clean coal" from Colorado and Wyoming, and 20% improvement in Energy efficiency by 2020, although Clean Coal still needs to be defined.

REGIS (CEC RE trading system) is still under development and expects to be up and running in 2006. She is unsure whether REGIS will credit solar as "premium" RECS or whether the RECs will disaggregate credits and kWh.

GOV SOLAR INITIATIVE

Amendments to SB, the Governor's Million Solar Roof Initiative 1000 MW CSP potential are still being written. Any bill that will be introduced will be based on input gathered at the Solar Summit held in December 04 in Sacramento. The Solar Initiative will have a 3000 MW goal and be based on Japan's declining PV rebate program. A major goal of the legislation is to encourage the "**cultural penetration**" of PV, which is getting solar to a place where it is seen as "normal." The legislation will also include:

- * Promote a self-sufficient solar industry in 10 years.
- * Require builders to offer solar as an option, not be mandated
- * Provide "carve outs" for affordable homes
- * Entertain T-24 integration. (Tier 2 level – define)
- * Will provide a \$100 M/year over 10-years

Amendments are expected by the end of March with final passage by June. The PUC is then expected to take up the work of devising a method for incorporating the rebates as a rate-based incentive.

Including solar in the RPS and supporting p to 1000 MW in CSP will be addressed as separate initiatives.

The meeting wrapped up with a round-robin discussion of other steps to take as a group and who can tackle this? Group comments included:

- * Inviting other REC providers to future meetings to discuss their products and marketing strategies.

- * Inviting influential speakers to give “keynote” addresses.
- * Don’t combine Solar Forum and CPVU meeting as it makes for too long of a day.
- * Combine with Key accounts meeting to help justify travel

Next meeting will be scheduled for June or July in northern California bay area location, such as Palo Alto, or Santa Clara.