



# CALIFORNIA ENERGY MARKETS

◆ Friday, October 12, 2012 ◆ No. 1202 ◆

**BILLBOARD**      **No. 1202**

- PG&E** Gets \$1 Million to Study Energy Storage ..... [4]
- SolarCity** IPO Filing Discloses Treasury Investigation ..... [5]
- Western States** Could Save Billions from Efficiency ..... [6]
- Potomac:** VP Candidates Spar On Energy ..... [7]
- LADWP** Approves 460 MW in New Solar Contracts ..... [8]
- Quick Bites:** Edison Issues Transmission RFO ..... [8.1]
- Bottom Lines:** You've Got the Power—Now What? ..... [10]
- San Bruno:** Furor Over Suspended Hearings .... [11.1]
- Public Utilities** Seek Hedging-Rule Relief ..... [17.1]
- GAO:** Shale Oil and Gas Risks Uncertain ..... [17.2]

**Western Price Survey**

- Natural Gas** Trends Higher, Power Prices Follow ..... [9]

**[1] Market Players Envision Competition Between Clean Energy and Conventional Power for Local Capacity**

Support is growing for letting “preferred” resources, such as demand response, energy efficiency, and distributed generation, compete alongside conventional sources of power such as natural gas in all-source bids for local capacity, but the devil of dispatchability lies in the details. San Diego Gas & Electric argues the move would require reworking the way the CPUC approaches procurement, which now entails separate programs for efficiency, demand response and large and small renewables. Market participants also spoke of the need to set criteria such as ramping and minimum-load requirements in any bids for local capacity. *At [12], one RFO to rule them all?*



A LED lightbulb upgrade.  
Photo courtesy Michael Gil.

**[2] CPUC Halts San Bruno Hearings; Delays Vote on BrightSource Contracts**

The California Public Utilities Commission suspended evidentiary hearings focused on the consideration of penalties against Pacific Gas & Electric for its role in the 2010 San Bruno pipeline explosion to allow time for settlement negotiations. San Bruno residents and leaders are vehemently opposed to the suspension. At a meeting on Thursday the commission also held off on deciding the fate of five power-purchase agreements between BrightSource Energy and Southern California Edison. The viability of and need for of the projects, some of which include molten-salt storage, have been called into question. *Looking for closure, at [11].*

**[3] Palo Alto May Have to Rework FIT Program**

With a commercial feed-in-tariff program that has failed to attract a single application since launching in April, the City of Palo Alto is in the process of reevaluating whether the price is right. Palo Alto’s program now offers a price of 14 cents/kWh for a 20-year power-purchase agreement, and utility officials say the price has not been high enough to attract developers who use the popular third-party leasing model, or anyone else for that matter. But as Palo Alto reconsiders the program’s offerings and costs, other municipal utility FIT efforts appear to be humming along. *Searching for the perfect FIT, at [14].*

## News In Brief

**[4] Tesla Awarded \$10 Million for Electric SUV; PG&E Gets \$1 Million for Storage**

The CEC this week gave \$10 million in funding to Tesla Motors for production of the Tesla Model X, its new all-electric SUV. The award was part of \$20 million in alternative transportation funding from the commission for clean transportation projects. The CEC also approved a \$1 million award to Pacific Gas & Electric for the first phase of the utility's proposed compressed air energy storage project. PG&E hopes to demonstrate the viability of the technology and establish its costs and benefits. *Transportation and storage awards at [13].*

**[5] SolarCity IPO Filing Discloses Treasury Investigation**

SolarCity disclosed in an IPO filing that it and other solar firms are being investigated by the Treasury Department for possibly overstating the value of solar systems that received federal incentives. SolarCity, which hopes to raise about \$200 million in its initial public offering, was subpoenaed to provide records dating back to 2007. The Internal Revenue Service is also conducting audits of two SolarCity investment funds. *New details in IPO filing at [15].*

**[6] Study Projects Big Savings From Energy-Efficiency for Western States**

The Southwest Energy Efficiency Project reported that energy efficiency programs could save \$19.8 billion in six western states by 2020. Arizona, Nevada and Colorado would all see increases in gross-state product from the programs, but revenues from coal mining and natural gas would decline in New Mexico, Utah and Wyoming. *Nevada isn't living up to its energy efficiency potential at [16].*

**[7] Biden, Ryan Trade Energy Blows**

Vice President Joseph Biden and Republican VP nominee Paul Ryan battled over energy stimulus funds in their feisty Oct. 11 debate at a Kentucky college. Meanwhile, the Commerce Department upheld proposed anti-subsidy and anti-dumping tariffs on Chinese solar-photovoltaic products. *Lieberman says White House might soon issue cybersecurity order to protect infrastructure, at [17].*

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**[8] LADWP Board Approves 460 MW of New Solar Contracts**

The Los Angeles Department of Water & Power Board of Commissioners approved on Oct. 4 two long-term power purchase agreements for solar power totaling 460 MW.

LADWP's board approved a 25-year contract with a K Road Power subsidiary for up to 250 MW from the Moapa Solar Project, to be sited on tribal land at the Moapa River Indian Reservation in Clark County, Nev. The facility, which consists of PV arrays and a concentrating solar power tower, will be connected directly to the LADWP transmission system at the utility's Crystal Substation, via a new 5.5-mile transmission line that will be purchased by LADWP.

The average annual cost for the energy from the Moapa Solar project is expected to be \$64.8 million, with total expenditures of \$1.6 billion over the 25-year life of the PPA. The fixed energy price for the contract is \$91.69/MWh, including the purchase of the transmission line.

Also receiving a green light is a 20-year contract for 210 MW of power from the 250 MW Copper Mountain Solar 3 project, a PV facility under development near Boulder City, Nevada by a Sempra U.S. Gas and Power affiliate. The power from Copper Mountain will be purchased through an arrangement with the Southern California Public Power Authority, of which LADWP is a member.

The average annual cost of energy resulting from the Copper Mountain contract is about \$40.2 million, with total expenditures estimated not to exceed \$805 million over the life of the 20-year agreement. The utility negotiated a fixed energy price of \$95.75/MWh.

The two contracts are the result of competitive request for offers project initiated by SCPA. LADWP has options to purchase both projects on the tenth year of operation, and every five years thereafter, for the life of the agreements *[L.B.V.]*.

**[8.1] Quick Bites: Energy News Roundup**

Southern California Edison has launched a request-for-offers for transmission from the Pacific Northwest. The minimum offer quantity is 20 MW for a 7x24 product, with the delivery period commencing Nov. 1, 2013 and running through Dec. 31, 2015. Edison needs to buy transmission to move energy from the 845 MW Caithness Sheperds Flat wind project in Arlington, Ore., into California.

Cal-ISO is initiating a new stakeholder process named "Flexible Resource-Adequacy Criteria and Must-Offer Obligations." A stakeholder meeting is scheduled on Oct. 29 to discuss a straw proposal, which will address tariff tweaks necessary to implement changes in flexible capacity procurement *[CEM Staff]*.

# Western Price Survey

## [9] Natural Gas Prices Trend Higher

Gas and power prices rose after the U.S. Energy Information Administration reported a smaller than expected addition to natural gas storage. Working gas in storage grew by 72 Bcf for the week ending Oct. 5, according to EIA estimates.

Henry Hub natural gas values gained 11 cents since last Friday, trading Oct. 12 at \$3.37/MMBtu. Western prices rose a bit more, with Malin natural gas up 28 cents to \$3.52/MMBtu. PG&E CityGate added 23 cents to \$4.06 and Southern California Border gas added 24 cents to \$3.62/MMBtu.

After the injection, working gas in storage reached 3,725 Bcf. Storage levels are now 6.8 percent higher than a year ago and 7.8 percent above the five-year average. Nevertheless, prices rose.

Natural gas futures increased “beyond previous yearly highs,” noted Barclays analyst Shiyang Wang in Barclay’s Oct. 12 *Commodities Weekly* report. On Thursday, following the storage report, the prompt contract ran past \$3.50/MMBtu while calendar 2013 traded above \$4 for the first time since the end of 2011, according to Wang. The natural gas injection figures imply “that demand is much higher than our estimates,” Wang said.

The EIA, in its *Short-Term Energy Outlook* released Oct. 10, predicts 2012 natural gas consumption should rise to an average of 69.8 Bcf/day, driven by a projected 22 percent increase in the electric power

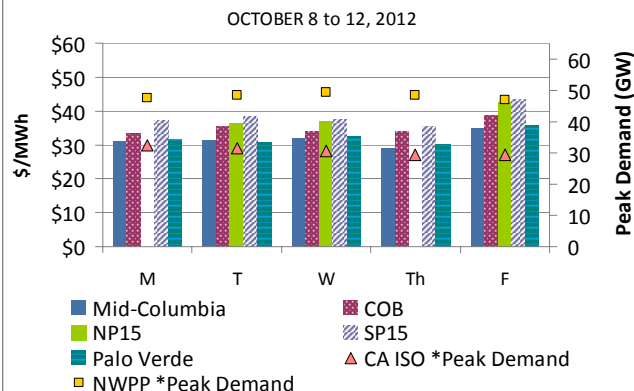
### Western Electricity Prices Week of October 8-12, 2012 (\$/MWh)

	Peak	Off-Peak
Alberta Pool (\$C)	19.30 – 381.70	12.30 – 91.60
Mid-Columbia	27.75 – 37	26.10 – 31.50
COB	33 – 40	26.75 – 31
NP15	36.50 – 45	27.25 – 33.50
SP15	35 – 45	25.90 – 31.50
Palo Verde	30 – 36	23 – 28.75

### Western Natural Gas Prices (\$/MMBtu)

Permian Basin, TX	3.04 – 3.39
San Juan Basin, NM	3.04 – 3.35
Southern California Border	3.36 – 3.67
Malin, OR	3.14 – 3.58
Alberta Hub	2.71 – 3.02

### Average Peak Power Prices vs. Demand



sector’s natural gas use for generation.

“A return to more normal temperatures this winter compared with last winter’s exceptionally warm weather in many parts of the country means U.S. consumers will use more natural gas, electricity, heating oil and propane for heating their homes this winter,” stated Adam Sieminski, the agency’s administrator, in comments released with the report.

*Enerfax*, meanwhile, cited Morgan Stanley estimates predicting an average price for natural gas of \$4.20/MMBtu between Nov. 2012 and March 2013.

Here’s how Western peak-power values fared since last Friday:

- **Mid-Columbia:** Up about \$4.35 to almost \$34.95/MWh;
- **California-Oregon Border:** Jumped \$7 to \$38.80/MWh;
- **North of Path 15:** Traded at about \$42.80/MWh, posted no trades the prior Friday;
- **Palo Verde:** Rose roughly \$5.45 to about \$35.65/MWh.
- **South of Path 15:** Added \$8.05 to \$43.60/MWh

Off-peak prices gained since Oct. 5, led by NP15, which rose roughly \$4.15. Average prices today ranged from about \$28.35/MWh at Palo Verde to almost \$32.25/MWh at NP15.

Unit 2 of the Diablo Canyon Power Plant became the latest Western nuclear generation facility to go offline. The plant was safely shut down shortly after noon Thursday after an electrical disturbance in equipment that moves power to grid, according to operator Pacific Gas and Electric. The utility is trying to determine the cause before restoring the 1,149 MW unit to full operation.

The 1,335 MW Unit No. 2 of the Palo Verde nuclear plant went offline Sat., Oct. 6 for scheduled refueling and maintenance, and both units of the San Onofre Nuclear Generating Station remain offline.

[Linda Dailey Paulson].

## Bottom Lines

### [10] You've Got the Power—Now What to Do With It?

Every now and then an advertisement tucked in the back pages of the newspaper will prompt a double-take: “Did I really just see that?” or “I had no idea they were still doing that.”

Such was the case with an ad I spotted recently featuring outdoor residential natural-gas lamps.

Readers of a certain age will remember when gas lamps were a common feature of upscale suburban homes. Long after municipal street lights, even the ones in renovated districts made to look like old-fashioned flickering gas lamps, had been switched over to electricity, post-mounted gas lamps by the front walk, sometimes adorned with a bracket holding the house number, could be regularly spotted in tony neighborhoods.

They'll also remember the natural gas “crisis” of the 1970s, when residential gas lights were deemed wasteful and a frivolous use of a dwindling resource. Better to save what gas we had for such crucial tasks as home heating, and leave ornamental lighting to an energy source (coal-generated electricity) that was better suited to the job.

**Today it's coal-fired** electricity and the incandescent light that are under siege, while we're so awash in gas that we're trying to find things to do with it. Burn it to produce electricity! Export it! Stuff it into cars and trucks to make them run!

As for gas lamps, it's safe to say attitudes have shifted yet again. Consider these enticements on Avista's webpage for customers to install outdoor gas lamps:

“Add charm and value to your home through modern or traditional lighting.” Other benefits noted: A gas lamp “won't create harsh shadows like flood lighting and won't attract insects,” and “requires little maintenance and remains lit through electric power outages.”

The gas lamp, being more decorative than utilitarian, is a bit of fashion whose appeal may wane. What won't fade is a question underlying this bit of anecdotal energy history and whose importance—not to mention possible contentiousness—will only grow.

**That question:** What is the optimal end use of various types of energy?

All energy sources are not created equal. They differ by the amount of energy content per measure of volume or weight, by the quantity of the resource, where it is, how much effort it takes to extract it, move it and transform it into a useful state.

Those qualities and limitations often dictate the course of energy and industrial development. Coal supplanted wood as the fuel for generating steam to power railroad locomotives because it was plentiful

and relatively easy to get from source to use. Diesel did the same to coal a century later for many of the same reasons.

Natural gas supplanted coal as a home heating fuel because it was easier to distribute and cleaner to handle. Very early on gasoline defeated steam and electric power as the preferred fuel for cars and trucks. In the wake of the oil supply-and-price shocks of the 1970s, the use of oil to generate electricity declined. Even in the land of cheap hydropower, natural gas managed to snare market share for residential heating.

The debates over what types of energy should be used for which purposes are not just historical ones. They're very much contemporary, as we're finding out.

**Beyond the issue** of where we're going to come up with additional sources of electricity to meet demand growth is where that demand is coming from. One big driver, at least in economic development circles: Server farms, for storing all those Facebook pages you don't look at, those emails you'll never read again, those photos of people you barely remember.

That Microsoft and Google and Yahoo and the like are building those server farms in places like Quincy, Wash., and The Dalles, Ore., is no great mystery—the power is cheap. But, skeptics wonder, is that the best use for that electricity? Server-farm construction gooses tax revenue and employment in the short term, but doesn't sustain a lot of jobs in the long run. Might that electricity be better used to generate more direct employment and economic activity (a selling point for the

SGL-BMW carbon fibers plant at Moses Lake, Wash.), or held in reserve to meet increased consumer and commercial demand, instead of having to later build more expensive resources?

**This isn't a new** debate. For years critics of the aluminum industry—back when there was one of significant size—questioned whether the region was getting sufficient return in the form of jobs for the favorable rates the smelters were paying.

It's not just a matter of economic activity. There are also considerations of energy and economic efficiency. If we're going to move from gasoline to something else, do we want that something else to be electricity, which started out in some other form and had to be transfigured and shipped, with energy losses at each step of the way? Is it preferable to run vehicles on natural gas instead of burning gas to make electricity to power them?

If the natural gas industry wants to carve out a larger niche as a transportation fuel, perhaps it could borrow some marketing themes from food sellers, and bill it as “the natural choice, unrefined, straight from

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**One big driver of demand is server farms, for storing all those Facebook pages you don't look at, those emails you'll never read again**

the Earth to you.” But natural gas won’t be an easy choice either, with its own issues of energy content and the need for infrastructure to transport, store and dispense it for vehicle use (not to mention modifications on the vehicles themselves).

The issues of source and quantity of supply have gotten far more attention than the issues of how and where we use the stuff after we’ve located and extracted it. At risk of invoking those dreaded words

“national energy policy,” that second set of questions ought to get a look, if only to say that we’ll let market forces sort out what’s the most efficient application of various types of energy. Whoever makes the decisions, the results will matter. Get them right and we can squeeze costs and inefficiency out of our energy consumption. Get them wrong and we might wind up with the equivalent of loading up the trunk of your steam-powered car with cords of wood *[Bill Virgin]*.

## Regulation Status

### [11] CPUC Delays Vote on BrightSource Contracts (from [2])

The CPUC held a vote on five solar-thermal power purchase agreements between Southern California Edison and BrightSource Energy.

The contracts are for projects that would be sited in San Bernardino and Riverside Counties, sized at 200 MW each. Three of the projects include molten-salt storage.

The contracts were to go before the CPUC for a vote on Oct. 11, but were instead pulled from the agenda to allow for further review. An all-party meeting to discuss the contracts is scheduled to take place at the CPUC on Oct. 22.

Citing additional issues that have come to light that impact the viability of the contracts, Ed Randolph, director of the CPUC’s Energy Division, said on Thursday that he “would not recommend the Commission approve the projects” based on a draft resolution authored by the division.

The draft resolution approves deals for the three solar-thermal projects with storage—Siberia 1, Siberia 2 and Sonoran West—but denies approval of the contracts for Rio Mesa 1 and Rio Mesa 2 due to cost concerns *[Res E-4522]*.

A draft alternate resolution by the Energy Division approved contracts for Sonoran West and Rio Mesa 2—but rejected cost recovery for Rio Mesa 1, Siberia 1 and Siberia 2. Randolph did not specifically address the draft alternate decision.

The CPUC is grappling with a number of mounting concerns about the BrightSource projects. The Department of Defense has noted potential detrimental impacts to military operations due to the close proximity of Siberia 1 and Siberia 2 to the 29 Palms military base. Environmental groups have taken issue with the projects, citing impacts to wildlife and desert habitat (see *CEM* No. 1201 [12]).

In arguing for approval of the contracts, BrightSource has asserted that the projects are part of a technology roadmap that will provide for the development of more advanced solar power tower technologies, including dispatchable solar thermal storage to address increased renewables penetration.

But various parties, such as the Western Power Trading Forum, have questioned whether the CPUC’s

role is to act as a ‘venture capital angel’ for a private company.

The Energy Division, in the draft resolution, pointed out that BrightSource already has eight CPUC-approved PPA’s totaling over 1,000 MW, giving the company “ample time and resources” to develop next-generation technologies.

**At Thursday’s meeting**, Commissioner Mark Ferron said the CPUC needs to examine whether approval of contracts for projects that use intermediate technologies such as molten-salt storage “would constitute a ‘carve-out’ for a new technology.”

Ferron also raised the issue of need, noting that SCE has proposed not holding a renewables portfolio standard solicitation for 2012. SCE asserts it can meet its RPS needs through programs that target smaller projects *[R11-05-005]*.

Commissioner Timothy Simon wondered if the CPUC is doing an adequate job assessing the pricing and value of molten-salt storage projects.

Randolph conceded that CPUC has not been able to comprehensively weigh the economic value—to ratepayers and the grid—afforded by solar thermal projects with storage.

“I don’t think we’ve captured the full range,” of benefits, Randolph said *[Leora Broydo Vestel]*.

### [11.1] CPUC Judge Rules to Suspend San Bruno Pipeline Hearings

Over fierce opposition, the CPUC on Oct. 11 suspended evidentiary hearings on the fatal 2010 San Bruno pipeline explosion and fire to allow Pacific Gas & Electric and state regulators time to negotiate a fine the utility will pay for its role in the blast.

The hearings, a culmination of multiple CPUC investigations into PG&E’s operations, practices and record keeping, were set to focus on the company’s financial resources and ability to pay fines. PG&E is facing potentially hundreds of millions in fines for record keeping and poor pipeline maintenance.

The hearings were suspended via a joint ruling issued Thursday by two CPUC administrative law judges; the suspensions will remain in place until Nov. 1.

The CPUC’s Consumer Protection and Safety Division last week had requested a pause in the evidentiary hearings to allow time for parties to negotiate a settlement agreement.

The attorneys argued that “time and space” are needed for negotiations to continue unimpeded.

“Good cause exists to grant this request,” the CPD noted in the Oct. 5 motion. “In recent weeks, the parties in these four proceedings have commenced negotiations that have the potential to produce a stipulated outcome, with appropriate remedies for consumers.”

**In granting** the CPD request, the judges said the potential for “expeditious resolution of these matters more than offsets” delays that may result from the suspension if the negotiations fail.

“In view of the complex and highly contested nature of these proceedings we are persuaded that a stipulated outcome developed in accordance with our settlement rules may be a reasonable alternative to a litigated outcome,” the judges noted in the ruling.

In comments submitted to the CPUC, PG&E said it supported the suspension, also agreeing it could lead to a speedier resolution.

“Where a fully-litigated outcome would extend these proceedings—and the diversion of Commission and PG&E resources—until the middle of 2013 or later,” PG&E noted, “the Commission could address a proposed stipulated resolution before the end of this year.”

Elected officials and residents of San Bruno reacted sharply at the Oct. 11 CPUC business meeting to the effort to suspend public hearings and continue in closed-door settlement negotiations.

“The victims of San Bruno deserve justice,” Assm. Jerry Hill (D-San Mateo) said at the meeting. “The truth was supposed to come out.”

**Rene Morales**, who lost her daughter in the disaster, said suspending the hearings was unacceptable.

“By closing the doors to the hearings,” Morales stated, “it basically opens the grave to my daughter and all the other eight victims.”

Responding to calls for his resignation by San Bruno residents, who charged he was trying to orchestrate a back-room deal, Commission President Michael Peavey said that any fines that are agreed upon by the parties would have to then be considered in public.

“No one will be shut out and every voice will be heard,” Peavey asserted. “The intent of myself and all of us to render justice to all” [*Leora Broydo Vestel*].

## [12] Market Players Clash on How to Use Clean Energy for Local Capacity (from [1])

Support is growing for making utilities consider clean-energy sources in all-source solicitations for local capacity, but promoting competition, avoiding program duplication and ensuring reliability seems a difficult balance.

Traditionally investor-owned utilities procure demand-response, energy-efficiency and renewables—the state’s “preferred resources”—through mechanisms that are separate from conventional resources, such as gas-fired generation and transmission, which are considered in long-term procurement planning and resource-adequacy proceedings. Preferred resources

can offset the need for resource-adequacy capacity to some degree, but do not compete directly with gas-fired power as supply-side resources to fill local reliability needs.

**In Oct. 5 comments** to the CPUC, market participants have laid out ways to let preferred resources compete. The comments were filed in the long-term procurement planning and energy-storage proceedings [R12-03-014] [R10-12-007].

Southern California Edison has floated two approaches. The first, “flexible procurement,” would let Edison simultaneously

consider “non-large-scale generation” for local capacity by performing an assessment of transmission upgrades, energy storage, incremental demand reductions and distributed generation. Edison would analyze

all resources under the “least-cost, best-fit” lens and begin procuring through bilateral negotiations or solicitations, followed by a power-purchase agreement submitted to the CPUC for approval.

The second approach would be an “all-source request-for-offers.” Cal-ISO would set detailed local-capacity reliability needs in megawatts, taking into account objective criteria such as ramping, load-following, quick-start capability and other factors. Edison would then conduct a solicitation open to all resources that meet one or more of the requirements, and select the least-cost offers that meet the need.

**Cal-ISO favored** Edison’s all-source RFO approach for both local, system and flexibility capacity needs, where all resources would be able to compete to meet objective criteria.

“Ultimately the goal should be to develop preferred resources, like DR and efficiency, through competitive non-discriminatory resource solicitations,” the grid operator said.

Cal-ISO noted, however that energy-efficiency is best-considered as a supply-side resource as it is not dispatchable, but demand-response, energy storage and certain distributed generation, which are dispatchable, require “greater scrutiny” as eligible capacity. And when it comes to flexible capacity to integrate renewables, one key metric is Pmin—the minimum load a generator can sustain. Lower Pmins minimize over-generation and negative prices when too many renewables are online, the grid operator said.

**The Utility Reform Network** also favored the all-source RFO approach, though Edison should undertake a study to analyze other technologies that cannot obtain a “net qualifying capacity” rating. (An NQC rating is necessary to count as resource-adequacy capacity).

Also, smaller renewable energy projects “may not be able to compete effectively in an RFO,” which is geared towards larger resources, and so alternate procurement mechanisms need to exist, TURN said.

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**‘Ultimately the goal should be to develop preferred resources, like DR and efficiency, through competitive non-discriminatory resource solicitations.’**



Given the existing separate proceedings for procurement of energy efficiency, demand response, large-scale renewables, distributed generation and combined heat-and-power, as well as various feed-in tariffs for small generators, it's questionable what will be leftover for a local capacity solicitation, San Diego Gas & Electric said.

"By the time the utilities issue an RFO to fill the residual need, in most cases they have already reduced the capacity need for all cost-effective levels of preferred resources," the utility said. If the CPUC wants to consider broadening the RFO, it will have to re-examine its existing procurement mechanisms.

The utility also said that "regular all-source RFOs are not necessary and may actually cause harm to the extent they cause confusion in the market and cannibalize dedicated preferred resources."

**SDG&E pointed** to its 2007 RFO for supply resources, which included a solicitation for demand-response as well as generation. The utility entered into a long-term bilateral negotiation for DR from that RFO, but terminated the contract after 18 months. More than 63 percent of the enrolled load and 38 percent of the customers in the DR agreement were already participating in a program funded by SDG&E's Capacity Bidding Program, which approved in the CPUC's demand-response proceeding.

The all-source RFO "also caused confusion in the renewable development community—potential bidders were not sure whether it was necessary to resubmit into the all-source RFO project that had already been submitted into an RPS-only RFO," the utility said. "There were concerns that any renewable project selected as part of the all-source RFO would displace projects bid into the RPS-only RFO."

"In addition, requesting that non-dispatchable renewable resources bid into an RFO that is intended to fill a need for fully dispatchable capacity is plainly a waste of bidders' time and resources," SDG&E said.

The California Energy Storage Alliance urged the CPUC to use a blueprint RFO it developed, which "will clearly signal to potential bidders that energy storage resources can participate in the solicitation process" to meet local and system capacity needs and will be "seriously considered."

EnerNOC, a demand-response provider, suggested that first the CPUC reduce capacity needs by the expected growth of preferred resources over the plan-

ning horizon. More than 1,200 MW of existing, dispatchable DR exists in Los Angeles Basin and Big Creek/Ventura areas, which could reduce local need, the company said.

After taking into account such growth, the CPUC could then allow an RFO for the remaining capacity needs, and define the flexible attributes needed.

Cal-ISO, however, does not want to include "uncommitted" energy-efficiency and DR programs in forecasts for local capacity (see *CEM* No. 1200 [12.1]).

For local capacity, the Division of Ratepayer Advocates suggested determining a listing of priority locations for preferred resources, at local capacity sub-areas or substations. It is difficult, however, to determine whether energy-efficiency can fulfill local resource needs through a request-for-offers process, DRA said.

The Vote Solar Initiative has suggested that for residential rooftop photovoltaics, a solar aggregator could offer a certain number of megawatts in a certain local reliability area for a one-time, upfront payment [*Chris Raphael*].

### [13] CEC Awards Electric Vehicle, Energy Storage Grants to Tesla, PG&E (from [4])

Tesla Motors won a \$10 million award from the CEC to buy equipment for the production of its new Model X, an all-electric SUV. The award, approved at an Oct. 10 business meeting, was among \$20 million awarded by the commission for clean transportation projects.

The commission also awarded Pacific Gas & Electric a \$1 million research grant to go toward costs of the first phase of a proposed compressed air energy storage project. Through the \$50 million Phase I of the CAES project, the utility hopes to demonstrate the viability of the technology, establish its costs and benefits, and validate system reliability, durability, and ability to scale. The project will use off-peak energy, such as intermittent wind energy, to inject compressed air into depleted natural gas reservoirs; the stored air will be used to generate electricity during periods of high demand. PG&E's project would be the third CAES project in the world, according to an Oct. 2011 presentation by the company, and the first commercial CAES project to utilize porous rock formations such as a gas reservoir,

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PG&E expects to pinpoint potential sites this year, and begin early next year drilling core samples of chosen sites to determine geologic characteristics and viability for the project, said Valerie Winn, manager of state agency relations for PG&E, at the meeting. The utility has already evaluated 124 potential sites based on technical, environmental and other siting criteria, according to the Oct. 2011 presentation. Once a cost-benefits analysis is performed, the company will then make a decision to move ahead or not with the project, Winn told commissioners.

**The CEC award** is a cost-share for the project's first phase. The U.S. Department of Energy awarded PG&E \$25 million to co-fund up to 50 percent of Phase I of the project, and the CPUC in January 2010 approved ratepayer recovery of up to \$24.9 million for the other half of Phase I. The total project cost for all three phases is estimated at \$356 million.

The Tesla award, from the CEC's Alternative and Renewable Fuel and Vehicle Technology Program, - capacity in its Fremont facility - the former New United Motors Manufacturing Inc. - facility that Tesla bought in 2010.

Tesla expects to accelerate production of its Model X SUV, which will be its third model after the Tesla Roadster and the Tesla Model S sedan. Tesla hopes its can jumpstart interest in electric cars with the crossover/SUV, which no company has been able to mass produce before due in part to added complexities of the SUV vehicle structure, according to the CEC.

The vehicle features a driving range of more than 240 miles on a single charge, which could go a long way to alleviate so-called "range anxiety" for drivers of EVs with battery ranges typically well below that.

**Tesla will match** the CEC grant with \$50 million in matching funds, and expects to hire as many as 500 more workers as production ramps up at the end of 2013. The company expects to produce 10,000 to 15,000 Model X vehicles a year starting in 2014. Tesla unveiled the Model X earlier this year and is priced at \$50,000 to \$60,000, roughly the same price points as its Model S sedan.

"Too often we're portrayed in the press as only producing a sports car," said Mike Taylor, vice president of finance at Tesla. Producing the Roadster first was a strategic decision to generate margin and enthusiasm, he added. "Our mission has always been to aggressively promote affordable vehicles for the masses."

Commissioners praised Tesla for its efforts to innovate and diversify the electric car fleet. "We don't take any investment lightly," Commissioner Carla Peterman said. "I look forward to the car becoming cheaper over time, even to the point where some of us government employees can afford them."

The additional awards the CEC approved under the ARFVT program can be found here:

[http://www.energy.ca.gov/releases/2012\\_releases/2012-10-10\\_energy\\_commission\\_awards\\_nr.html](http://www.energy.ca.gov/releases/2012_releases/2012-10-10_energy_commission_awards_nr.html)

[Mavis Scanlon].

## Regional Roundup

### [14] Palo Alto Reassessing Feed-in-Tariff Program Due to Lackluster Response (from [3])

The City of Palo Alto is considering whether or not to revamp its six-month old solar feed-in-tariff program because no applications for the program have been submitted to date.

The Palo Alto CLEAN (Clean Local Energy Accessible Now) program has been up and running since April and provides a means for developers or building owners to sell solar power from local projects directly to the city for a fixed price under long-term contracts. The city's goal was to contract for up to 4 MW of solar in the first year of the program.

But so far the FIT program, administered by City of Palo Alto Utilities, has failed to attract applications with the current price offer of 14.003 cents/kWh for a 20-year contract, 13.216 cents/kWh for a 15-year contract and 12.360 cents/kWh for a 10-year contract.

"Fourteen cents per kWh is the most cost-effective price we can do for local solar," stated Jon Abendschein, a senior resource planner at CPAU. "The decision we're trying to make at the moment is whether we want to continue at that price."

Abendschein said several solar developers who use the third-party leasing model for rooftop solar expressed interest in the FIT program, but they asserted they could not get both an adequate rate of return—and offer attractive lease terms to building owners—under the current tariff.

The Palo Alto FIT program also has to compete with the city's popular SB1 solar rebate program. Under current 'step' levels, large commercial customers can obtain an upfront \$2/watt rebate and a performance-based incentive of 25 cents/kWh, paid monthly over a five-year term.

The Palo Alto City Council will reevaluate the FIT program in December. For now, CPAU staff has recommended that the program move forward under the existing pricing scheme, while efforts are made to do additional outreach to a wider range of building owners, particularly buildings that are not owner-occupied, to try and generate interest in the program. The city's Utilities Advisory Commission endorsed this approach at an October 3 meeting.

"There are encouraging indications that Palo Alto CLEAN, as currently priced, will generate participation in the future," a staff report notes.

**While acknowledging** the 14 cent/kWh price was "insufficient to enable a business model involving a



3rd party developer,” staff believes that it would provide a reasonable rate of return “if a property owner invested in a system partially financed with debt.”

CPAU staff cites the example of a FIT arrangement between Marin Clean Energy and the San Rafael Airport, whereby the building owner financed a 972 kW photovoltaic rooftop solar array with a loan from a bank.

The Marin FIT price is about 13.7 cents/kWh for a 20-year solar contract. MCE received four FIT applications totaling about 3.8 MW after launching a program in January 2011. The other projects “are still pending due to interconnection, financing, or permitting,” noted Jamie Tuckey, spokesperson for MCE.

Toby Couture, director of renewable energy for IFOK GmbH in Berlin, Germany and a FIT program specialist, believes that 14 cents/kWh plus the federal tax incentives “is plenty to make a profitable solar project happen in Palo Alto, based on current PV module costs and the solar resource available in that area.”

“The only reason I can see why people wouldn’t be taking advantage of that is that there is a more lucrative offer elsewhere,” Couture added, “namely in the upfront capacity incentive being offered.”

CPAU has examined increasing the prices. Raising the FIT price to 18.8 cents/kWh for a 20-year contract—an increase to encourage projects on large commercial properties—would result in a \$483,000 increase in CPAU’s energy costs, for example. Even at the current tariff, CPAU staff estimates that buying 4 MW of local rooftop solar will cost about \$158,000 per year more than buying the same energy from renewable sources located outside of Palo Alto. This amounts to a 0.1 percent increase in the cost of energy for CPAU.

**Other municipal** utility FIT programs have seen greater participation rates. One shining example is the FIT program offered by the Sacramento Municipal Utility District, which is fully subscribed at 100 MW with a leveled price for solar of about 14 cents per kWh.

Craig Lewis, executive director of the Palo Alto-based Clean Coalition, points out that there are a number of factors that make the SMUD program a draw for developers, not the least of which is the availability of affordable real estate in SMUD’s service territory.

While Palo Alto’s FIT program targets rooftop solar, Lewis said SMUD’s program is largely made up of projects that utilize ground-mounted solar photovoltaics and single-axis tracking. These systems generate more energy than rooftop PV, and hence can generate more money for project owners.

**On the other hand,** Marin Clean Energy, a community choice aggregation program serving Marin County, and soon, the City of Richmond, has garnered interest from developers for its FIT program with an offer of around 13.7 cents/kWh for a 20-year solar contract.

MCE received four FIT applications totaling about 3.8 megawatts after launching a program in January 2011. The program, currently capped at 2 MW but with plans to expand, has so far signed one contract for a 972 kW photovoltaic rooftop solar array at the

San Rafael Airport. The other projects “are still pending due to interconnection, financing, or permitting,” noted Jamie Tuckey, spokesperson for MCE.

The Los Angeles Department of Water & Power recently launched a solar FIT program but instead of offering a set price for power from the get-go, the utility first launched a 10 MW price-discovery phase.

**LADWP** received more than 26 applications during a 1.5 month bidding period and will soon award long-term contracts based on the most attractive bids. LADWP plans to use the results of bidding process to inform rates for subsequent phases of the FIT program (See *CEM* No. 1176 [14]).

Craig Lewis supports the use of a “volumetric price adjustment” system for FIT programs in the state. The VPA concept is similar, he said, to the tiered nature of the state’s SB1 solar program, only the FIT prices offered would go up as well as down, depending on interest.

“It’s an elegant solution for setting the price in a manner in which the market dictates,” Lewis said.

*[Leora Broydo Vestel].*

## [15] SolarCity Details Business Risks in IPO Filing (from [5])

SolarCity, the largest solar photovoltaics installer in the U.S., hopes to raise about \$200 million in an initial public offering. The San Mateo company, which announced plans to go public in April of this year and filed a draft confidential stock registration statement with the U.S. Securities and Exchange Commission, filed a public registration statement Oct. 5.

Revenue has grown quickly as SolarCity’s solar system leasing business has taken off; it also sells solar systems and offers power-purchase agreements. SolarCity then monetizes assets created by its leases and agreements through investment funds formed with banks and corporate partners. To date, San Mateo-based SolarCity has raised \$1.57 billion through 23 investment funds and related financing facilities established with partners such as Credit Suisse, U.S. Bancorp, Google, and PG&E Corp.

**But the company** warned investors of risks, including the potential loss of federal and state incentives; caps on net energy metering; an audit that found poor internal financial controls; and investigations by the IRS and the Office of the Inspector General of the U.S. Department of Treasury.

In July, the Inspector General’s office issued subpoenas to SolarCity and other large solar companies related to applications for U.S. Treasury grants. The Inspector General and the U.S. Department of Justice are investigating possible misrepresentations concerning the fair market value of solar systems submitted for grants under the federal program; SolarCity and investors in its funds claim the federal tax incentives or grants based on the fair market value of the installed systems. The company uses an independent appraiser to determine fair market value.

SolarCity said in its SEC filing it is not aware of specific allegations against it, but that DOJ could bring a civil action against it if it finds that Treasury

awarded grants based on inflated solar system values. That in turn may require SolarCity to pay damages and penalties to the government and indemnity payments to certain of its fund investors, the company said. SolarCity expects it will take at least six months to gather and send documents to Treasury, and another year before the investigation concludes.

“The U.S. Treasury Department has determined in a small number of instances to award us U.S. Treasury grants for our solar energy systems at a materially lower value than we had established in our appraisals and, as a result, we have been required to pay our fund investors a true-up payment or contribute additional assets to the associated investment funds,” the filing stated. This happened as recently as the fourth quarter of last year.

**As of June 30**, the company and its investment funds had a balance of \$190 million in Treasury grants that had been received since 2010 or were in process.

SolarCity also disclosed the IRS this month began income tax audits of two SolarCity funds that received Treasury grants under Treasury’s 1603 grant program. If the audits conclude solar systems were overvalued and the company received grants based on the higher valuations, SolarCity would be subject to tax liabilities, including interest and penalties. A hypothetical downward adjustment of \$325 million in fair market value of solar systems would obligate SolarCity to repay \$16 million to its fund investors, the company said.

Another risk is the company’s own internal controls over financial reporting. Audits of financial statements for 2010 and 2011 found material weaknesses or deficiencies in internal controls and inventory processes, the company said, in part related to the complex accounting policies associated with its investment funds. Since then SolarCity has taken numerous steps to address the issues, by developing and implementing improved policies and procedures and by hiring more accounting and finance personnel, the filing stated.

**Rising solar** panel prices would also hurt the company’s business, according to the filing.

The company serves residential, large commercial, and military customers in 14 states, and plans to expand internationally, according to the SEC filing. In addition to what the company calls “high quality” recurring customer payments, it also receives investment tax credits, accelerated tax depreciation and other incentives. About 21 percent of the company’s solar customers in 2011 bought additional services from SolarCity such as energy-efficiency upgrades.

SolarCity reported revenue of \$71 million for the first six months of 2012, up 252 percent compared with the first six months of 2011. Solar leases generated about 27 percent of that total, with solar system sales accounting for the rest. The company’s gross margin grew to 30 percent for the first half of this year, up from 13 percent for the first of 2011, according to the filing.

In 2011, SolarCity posted \$59.6 million in revenue, up about 84 percent compared with \$32 million in 2010.

Even with revenue soaring, SolarCity’s net loss widened to \$73.7 million last year from \$47 million in 2010. For the first half of 2012, SolarCity posted a net loss of \$49 million.

**To continue** growing, SolarCity’s strategy is to rapidly grow its customer base by adding sales, marketing and operations personnel, continue to offer lower-priced energy than that of utilities, leverage its brand and long-term relationships, and expand into new markets. The company says the current lower cost of solar panels and its financing and pricing options, coupled with its own streamlined operations make it possible to sell or lease solar systems at little or no upfront cost and offer long-term fixed power prices that are lower than those offered by utilities.

SolarCity was founded in 2006 by Lyndon and Peter Rive, cousins of Elon Musk, Tesla Motors’ CEO and chairman. Musk is chairman of SolarCity and owns 31.9 percent of the company’s shares prior to the offering. Lyndon and Peter each own 7 percent of currently outstanding shares. Funds affiliated with venture capital firm Draper Fisher Jurvetson own 26 percent of the company; other venture investors include Generation IM Climate Solutions Fund, which own 7.5 percent, and entities affiliated with Bay Area Equity Fund, which owns 7 percent *[Mavis Scanlon]*.

**Even with revenue soaring, SolarCity’s net loss widened.**

**[15.1] CEC Answers Motion to Limit Review of Solar Thermal Power Plant**

A CEC committee deferred addressing some questions BrightSource Energy raised in a motion that sought to limit the commission’s review of the proposed 500 MW Hidden Hills Solar Electric Generating System.

In an Aug. 31 motion, BrightSource sought to limit the CEC review of the project to in part reduce the amount of time parties in the proceeding would later spend in evidentiary hearings.

BrightSource sought an order from the committee overseeing the Hidden Hills licensing case to clarify the following:

- Whether the developer or CEC staff could determine project objectives;
- Whether the preliminary staff analysis of Hidden Hills analyzed project alternatives that BrightSource contended were infeasible;
- Whether analyzing a “no project” alternative violates the California Environmental Quality Act in this situation;
- Whether the preliminary analysis had improperly analyzed impacts of project components that are located on public land in Nevada that BrightSource says should be exempt from CEQA analysis (see *CEM* No. 1199 [12]).

The committee determined in an Oct. 2 order that two of the questions raised in the BrightSource motion, the feasibility of alternatives and whether ana-

lyzing a “no project” alternative violates CEQA, were questions of fact—rather than questions of law—that would be resolved in evidentiary hearings.

On the question of whether CEQA allows commission staff to broaden project objectives “to facilitate a legally adequate alternatives analysis” the committee determined that is consistent with the law, and cited several cases backing up that finding.

And while the committee agreed with BrightSource that CEQA exempts from review project components located out-of-state that will be reviewed under the National Environmental Policy Act, it found that CEQA does not exempt out-of-state components that could have a significant impact in California *[M. S.]*.

## Southwest

### [16] Western Utilities Could Save Billions through Efficiency (from [6])

Enhanced energy-efficiency programs would save a net \$19.8 billion for six western states, add 28,000 jobs and improve public health by 2020, according to a study released Oct. 9 by the Southwest Energy Efficiency Project.

By investing \$17.3 billion in energy efficiency, the six states—Arizona, Nevada, Colorado, New Mexico, Utah and Wyoming—could save 234,500 GWh for the region by 2020, or 21 percent of utility electricity sales.

According to the study, “The \$20 Billion Bonanza,” the high-efficiency regime would produce \$53.5 billion in public health benefits by 2020, mainly by reducing sulfur dioxide and nitrogen oxide emissions from coal-fired power plants. The energy efficiency measures also would lower power plant water consumption by 18.5 billion gallons yearly.

Under the SWEEP proposal, residential energy-efficiency programs would save an average of 3.6 cents/kWh. Commercial and residential programs would save an average of 2.2 cents/kWh, the study said.

Arizona would add 10,400 jobs, raise total wage and salary compensation by \$382 million and increase its gross state product by \$44 million by 2020.

Nevada would create 4,680 jobs, increase total wages and salaries by \$246 million and boost gross state product by \$284 million by 2020.

The high-efficiency program in Colorado would add 6,960 jobs, raise wages and salaries by \$334 million and lift gross state product by \$277 million by 2020.

However, high-efficiency programs would drag down revenues from the coal mining and natural gas production industries, causing decreases in the gross state products of New Mexico, Utah and Wyoming by 2020.

The study outlines 10 best practices for residential energy efficiency programs, including low-income weatherization and home retrofits, and eight best

practices for commercial and industrial programs, including new commercial construction programs, rebates and incentives and on-site combined heat and power systems.

Already, Arizona Public Service and Tucson Electric Power were saving 1.4 percent of sales through energy efficiency programs last year, putting them in the top tier nationally for energy efficiency, the report said.

Major utilities in Nevada, Utah and Colorado were saving 1 percent of sales, but PNM, which serves New Mexico, lagged at 0.6 percent. Wyoming has not adopted energy efficiency legislation, the study said.

#### Numerous recommendations

To boost energy efficiency, SWEEP made several policy recommendations for each state.

The Arizona Corporation Commission should adopt performance-based incentives for investor-owned utilities, SWEEP said. While the commission has adopted a lost-revenue recovery program to compensate Arizona Public Service for declines in power consumption stemming from the utility’s energy efficiency programs, the commission also should adopt lost-revenue mechanisms for other investor-owned utilities, according to the nonprofit group.

The Colorado Public Utilities Commission, which requires Xcel Energy to use energy efficiency programs for 1.7 percent of sales by 2020, should raise the goals and ensure utilities are rewarded financially for effective energy efficiency programs, the study said.

SWEEP urged the Nevada Legislature to remove energy efficiency programs from the renewable energy portfolio standard and establish separate energy savings requirements. Nevada state lawmakers should also replace a controversial lost-revenue recovery mechanism with a decoupling system that assures utilities recover “no more or no less” than their fixed costs, the study concluded. A decoupling mechanism separates or decouples recovery of electric utility fixed costs from the amount of electricity it sells.

Nevada’s two utilities, Sierra Pacific Power and Nevada Power, saved 440 GWh, or 1.5 percent of retail power sales, in 2009 from energy efficiency, but have dropped to 278 GWh or 1 percent of sales in 2011, the study reports.

The Attorney General’s Bureau of Consumer Protection and others persuaded the Public Utilities Commission of Nevada to reduce energy efficiency budgets that increased rates short-term, despite long-term savings from energy efficiency, said Stephen Wiel, Nevada representative for SWEEP.

“It’s improved in all the other (five) states in the last three or four years,” Wiel said. “It’s on a decline in Nevada.”

Daniel Jacobsen, the bureau’s technical staff manager, said the bureau favored cutting some energy-

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**‘Nevada’s demand for energy is not growing,’ Jacobsen said.**

efficiency measures, such as one for compact fluorescent bulbs, because the market for the lights has matured and incentives are no longer needed.

“Nevada’s demand for energy is not growing,” Jacobsen said. “If it were growing, these efficiency programs would make more sense than so that we could avoid building the next big generation plant,” he said.

Jacobsen expects SWEEP to ask the state legislature to require decoupling, with rate adjustments made more frequently than the three years between general rate cases.

The bureau believes that frequent rate adjustments would reduce risk to electric utilities and thus should lead to lower allowed rates of returns for utilities, Jacobsen said. Also, he said utilities tend to be more cost conscious when they must wait three years for a change in base rates.

Separately, the New Mexico Public Regulation Commission should set up performance-based incentives to allow utilities to profit from effective energy-efficiency programs, the study recommended.

Also, the commission should pursue decoupling, according to the study.

“SWEEP indicated that decoupling is an essential part of the policy framework to achieve a greater level of energy efficiency,” Commissioner Jason Marks told California Energy Markets. “If load continues to grow with decoupling in place, the companies are likely to refund money back to the customers. I want to guarantee that there are actual savings to customers (from energy efficiency programs),” Marks said.

The Utah Public Service Commission should adopt energy savings goals, as recommended by the state legislature, remove financial disincentives and provide financial incentives for PacifiCorp to implement energy efficiency programs, according to SWEEP. In addition, the PSC should adopt decoupling for PacifiCorp, the study said.

Wyoming also should set goals for energy efficiency and remove financial disincentives and provide incentives for energy efficiency programs, according to the study.

The study said all six states should strive for maximum customer participation in energy-efficiency programs, avoid setting arbitrary caps on funding for cost-effective programs and require or persuade small municipal utilities and rural cooperatives to implement energy efficiency programs [John Edwards].

### [16.1] First Solar to Offset Use of Water at PV Facility

The Public Utilities Commission of Nevada on Oct. 10 approved a 400 MW, Southern Nevada solar photovoltaic project that will send treated wastewater into a groundwater basin to compensate for water usage at the PV plant.

The commission approved Silver State South, a First Solar project, under the state’s Utility Environmental Protection Act.

The project includes laying 3,800 feet of six-inch pipes that will carry wastewater from the Nevada De-

partment of Correction’s Jean Conservation Camp to the Gold Strike Hotel and Casino. The casino will treat the water in its sewage plant, and discharge it back into the local water basin.

The treated wastewater will satisfy the project’s obligation to “recharge,” or replenish, the Ivanpah Valley groundwater basin so Silver State can use potable water at the solar facility.

The Las Vegas Valley Water District holds water rights that limit the amount of water it takes from the basin. The water district would be prohibited from providing Silver State South with water unless Silver State South recharged water into the basin to compensate for its expected annual use of 21 acre feet of water, according to a commission report.

Silver State South will need water to wash solar panels and for workers, the report said.

Southern California Edison has signed a power purchase agreement with First Solar for 250 MW from the PV installation, which will occupy 2,500 acres of land owned by Nevada and Clark County [J.E.J.].

## Potomac

### [17] VP Candidates Battle on Energy (from [7])

Vice President Joseph Biden and Republican VP nominee Paul Ryan battled over energy stimulus funds during their feisty debate at a Kentucky college Oct. 11.

Ryan, a Wisconsin congressman, blasted “\$90 billion in green pork to campaign contributors and special interest groups,” paid out in what he called “crony capitalism and corporate welfare.”

Biden pushed back: “All this talk about cronyism. They investigated and investigated, did not find one single piece of evidence.” He said Ryan wrote him a letter asking for stimulus funds for Wisconsin projects.

Meanwhile, surrogates for President Obama and Republican challenger Mitt Romney highlighted the candidates’ energy positions at an Oct. 5 debate sponsored by the Massachusetts Institute of Technology’s Energy Initiative.

Speaking for Obama, Joseph Aldy, a Harvard University public policy professor and researcher for the National Bureau of Economic Research, talked up the president’s “balanced approach” of investing in renewable-energy technology.

Aldy said Romney’s “unbalanced approach” is “focused almost exclusively on fossil fuels” and “rolls back environment safeguards that save lives,” including power plant mercury-emissions standards in effect since last December.

Romney campaign domestic policy adviser Oren Cass criticized the Obama administration for spending “\$90 billion of energy stimulus on green-energy programs that have not produced results.”

Cass said the federal government should stick to funding research in which the private sector likely

would not invest, and open more federal lands to oil and natural gas production.

Cass said climate policy likely would not be a high priority in a Romney administration, and characterized energy efficiency as often “a solution in search of a problem.”

### Commerce Upholds Chinese PV Tariffs

The Commerce Department on Oct. 10 upheld anti-subsidy and anti-dumping tariffs proposed earlier this year on Chinese crystalline solar-photovoltaic products.

Commerce reaffirmed anti-dumping tariffs ranging from 25.96 to 249.96 percent, and anti-subsidy levies of 14.78 to 15.97 percent on Chinese exporters.

The tariffs are subject to final sign-off by the International Trade Commission, which is scheduled to decide no later than Nov. 23.

Commerce ruled on a petition filed last year by Oregon-based SolarWorld Industries America, which leads the Coalition for American Solar Manufacturing.

In a statement, Sen. Ron Wyden (D-Ore.) said he was “glad the administration intends to act against cheating,” but added the ruling “leaves a loophole” Chinese producers could exploit by fabricating panels with cells produced in third countries.

Jigar Shah, president of a rival solar-developers’ coalition opposed to tariffs, said his group is “gratified the scope of today’s decision is limited only to solar cells made in China.

### Interior Finalizes Renewable Energy Zones Plan

Interior Secretary Ken Salazar on Oct. 12 finalized a plan to establish 17 renewable energy development zones on 285,000 acres of federal lands in six states.

Salazar signed a record of decision that completes an environmental impact statement on the zones.

The zones, which hold more than 31,000 MW of solar development potential, are designed to streamline utility-scale solar projects by steering proposals to areas near transmission and few conflicts with other resources.

Two California zones cover 153,627 acres in eastern Riverside and Imperial counties. Other zones are located in Arizona, Colorado, Nevada, New Mexico, and Utah.

### Cybersecurity Executive Order Possible

The White House might issue an executive order in the next month beefing up cybersecurity protections for energy and other infrastructure, Senate Homeland Security Chairman Joseph Lieberman (I-Conn.) said in an interview Oct. 7.

Lieberman acknowledged chances of his cybersecurity bill passing before the 112<sup>th</sup> Congress ends are “less than 50-50,” and he also told *Platts Energy Week* the White House informed him “they’re working on it.”

Meanwhile, Defense Secretary Leon Panetta on Oct. 11 warned the U.S. is vulnerable to a cyber attack targeting “the computer control systems that operate

chemical, electricity, and water plants and those that guide transportation throughout this country.”

Panetta, speaking up for the Lieberman bill at a speech to business leaders in New York City, said a successful attack, which he characterized as a “cyber Pearl Harbor,” could “shut down the power grid across large parts of the country.”

Lieberman on Sept. 24 sent President Obama a letter urging him to “use your executive authority to the maximum extent possible.” His letter said the Homeland Security Department has “clear authority,” if ordered by the president, to assess risks, identify vulnerable systems and issue voluntary cybersecurity standards.

Presidential action, however, could not shield infrastructure owners from liability to which they could be exposed if they adopted the standards and harm resulted from a cyber-attack, Lieberman told *Platts Energy Week*.

His legislation provides such immunity, he added.

Meanwhile, electric-power groups on Sept. 27 cautioned another key Senate committee leader about legislation giving what they called duplicative standard-setting authority to Homeland Security.

The letter—sent to Senate Commerce Chairman Jay Rockefeller (D-W.Va.)—said the electric sector is subject to enforceable cybersecurity standards under FERC jurisdiction, while nuclear power plants must comply with NRC cybersecurity rules.

Edison Electric Institute, American Public Power Association, National Rural Electric Cooperative Association, Nuclear Energy Institute and Electric Power Supply Association all signed the letter.

Lieberman’s bill, S.3414, which he and ranking Republican Susan Collins (R-Maine) are sponsoring, faltered Aug. 2 when a move to cut off debate fell eight votes short of the required 60 votes.

The Lieberman bill would establish a National Cybersecurity Council authorized to develop an “incentives-based” program encouraging grid owners to adopt “voluntary, outcome-based cyber security practices.”

A group of Senate Republicans, led by Arizona’s John McCain, has criticized the Lieberman bill, saying it would give too much power to federal agencies

### Interior Approves Wyoming Wind Site

The Interior Department on Oct. 9 green-lighted a nearly 200,000-acre Wyoming site for a potential 3,000-MW wind-energy development.

Interior Secretary Ken Salazar authorized BLM to carry out environmental studies for the Sierra Madre and Chokecherry wind projects.

The plants would include up to 3,000 turbines on federal lands about 10 miles south of Rawlins. They would be operated by the Power Company of Wyoming LLC, Interior said [*Jim DiPesoj*].

### [17.1] Public-Utility Sector Seeks Hedging-Rule Relief

Publicly owned utilities on Oct. 9 asked the Commodity Futures Trading Commission for “interim relief” from a rule they fear could drive up costs of commercial hedging transactions.

The rule sets a \$25-million annual exemption for counterparties engaged in hedging transactions with “special entities,” which includes publicly owned electric and gas utilities, and power marketing administrations.

Starting Oct. 12, hedging transactions with “special entities” count towards the exemption. Public-power groups argue the CFTC rule would deter investor-owned utilities, gas producers and independent power producers from acting as swaps counterparties with publicly owned utilities, out of concern that exceeding the \$25-million exemption would subject them to CFTC regulation as swaps dealers, which comes with capital, margin and reporting requirements.

BPA joined a July 12 petition to CFTC seeking an exclusion in which publicly owned utilities’ commercial-hedging swaps would not count toward the \$25-million exemption. The American Public Power Association, Large Public Power Council, American Public Gas Association and Transmission Access Policy Study Group also were petitioners *[J.D.]*.

### [17.2] GAO: Shale Oil/Gas Health, Environmental Risks Uncertain

The long-term extent of health and environmental risks linked to shale oil and natural gas production is not known in detail, according to a Government Accountability Office report released Oct. 9.

Pinning down the precise magnitude of such risks is impossible, the study said, because of uncertainty over where wells will be drilled, varying quality of

producers’ well construction and management practices, and lack of studies comparing pre- and post-development conditions.

Potential air-quality impacts could arise from truck traffic, diesel engines used to power drill rigs, and venting and flaring of gas during well development, GAO said. However, air-quality impacts studies are “generally anecdotal, short-term and focused on a particular site or geographic location,” the report said.

Potential water-quality impacts could arise from stream withdrawals to prepare hydraulic-fracturing mixtures, and from potential spills of produced water, fracturing chemicals and drilling fluids as a result of tank leaks or impoundment failures, the report said.

Other risks include gas leakage into aquifers resulting from faulty well-cementing, it added.

Evaluation of such risks is limited by lack of baseline data on pre-development conditions, GAO said. In addition, risks may vary depending on the extent and pacing of development, and on differing geological characteristics in development areas, GAO added.

#### Republicans Seek Energy Review

Republican leaders of the House Energy and Commerce Committee on Oct. 10 asked the Government Accountability Office to evaluate the economic impacts of energy subsidies and tax preferences provided since 2003.

Energy Information Administration estimates of subsidies more than doubled between 2007 and 2010—to \$37.2 billion—and the value of tax preferences rose by a factor of five, to \$16.2 billion, between 1999 and 2010, the letter said.

There is insufficient understanding of how the spending has affected energy markets, the letter said. Chairman Fred Upton (R-Mich.) and three other lawmakers signed the request *[J.D.]*.