

Global Equity Research

Americas

UBS Investment Research

Electric Utilities & IPPs

Electric Utilities

Sector Comment

Cruisin' California

We met with all of the key CA electricity decision makers

We met with representatives of the CA ISO, the CA Energy Commission, the Senate's key energy policy makers, and the CA Public Utilities Commission. The state continues to make excellent progress towards meeting its energy goals but we think investors are likely to see choppy returns over the near- to intermediate-term.

Sense of change coming at the CPUC

Our takeaways from the CPUC meetings are: 1) Chairman Peavey may be contemplating retirement within the next year; 2) Cmsr. Ryan's confirmation deadline is approaching and there's no clear indication she'll be confirmed; and, 3) the CPUC is questioning whether renewable contracts need repricing downward.

Merchant generation in CA faces mixed outlook

We are incrementally cautious with regards to merchant gen, with a 33% RPS law likely passed next year. We see O&M for CCGTs increasing as more ramping is required to balance renewables, while both sparks and gen volumes will be depressed. However, we see increasing value to flexible dispatch, with improvement to both RA and Ancillary value likely. We see limited support for a forward capacity market as the CPUC continues to resist ceding jurisdictional control.

Stock Ideas

Our favorite regulated electric is Wisconsin Energy, our favorite competitive integrated name is Public Service Enterprise Group and our favorite IPP remains Calpine (we also include commentary on our trip to Calpine's Geysers plants).

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Highlights from regulator meetings

- Transmission needs largely fulfilled. All of the relevant agencies believe there is sufficient operating or planned transmission to meet the state's 33% renewable goals. Importantly, the issues are now down to execution of siting needs and construction. State legislators may in fact take up the CEQA (California Environmental Quality Act) next year in an attempt to modify environmental rules to ease the transmission siting approval process, including the potential for a master EIR (Environmental Impact Report) for entire regions rather than for individual projects.
- Commission membership uncertain. We met with a key staff member for the state Senator in charge of energy matters as well as the chiefs of staff of Chairman Peevey and Commissioner Ryan. We learned that that Chairman Peevey may be contemplating retirement, perhaps within the next year, and that he may also be working on a transition plan with Governorelect Brown. With respect to Commissioner Ryan, she needs Senate confirmation by January 20th in order to retain her commission seat. If not confirmed, Governor-elect Brown will need to nominate three commissioners to the CPUC (Commissioner Bohn and Grueneich's terms expire at the end of this year).
- CPUC Quorum. A quorum consists of three commissioners; simple majority votes are required. Ryan's potential departure, and the timing of replacement commissioners, could have an impact on commission approval of PCG's pending GRC settlement. We doubt PCG's rate case is decided before Ryan's potential last commission meeting on January 13th.
- Looking for austerity. We believe that the commission is likely to examine utility cost structures broadly speaking. Additionally, we believe that the commission is honing in on renewable pricing contracts but note that no renegotiation has been formally proposed. This concern is particularly acute for new contracts. Staff cited the mismatch between the decline in underlying costs and static PPA prices.
- Renewables standard gaining traction. Based on our discussion with the Senate staff, we believe the 33% renewable standard is more likely to become law under a Brown administration. In addition to a change in political leadership relative to prior attempts to pass the legislation, we believe the emphasis will be on meeting the requirements through higher intrastate resources rather than relying on import capacity. All of the agencies suggested that the three major IOUs have contracts in place to meet the 33% renewable target by 2020, if all of their contracted projects are completed (which seems unlikely to us).
- Renewables likely to pressure gas generation. We see renewables development as likely impacting both on and off-peak power prices as both wind and solar begin to materially impact power prices and reduce generation volumes; several of the agencies cited the recent 20% RPS Integration report recently released by the CA-ISO. Further, we believe greater ramping on turbines will increase the O&M cost structure of merchant players given the need for more frequent maintenance outages. The report projects an increase of up to 35% in starts for combined cycle

units relative to a 2012 reference case. We also note projected load growth is less than 1% per year through 2020.

- Capacity value and ancillary payments could substantially improve. Resource Adequacy (RA) payments going forward are expected to explicitly incorporate ramping and dispatch capabilities. Generators faced a sequential decline in the value of ancillary services through the last multiyear period, but we believe this trend should begin to moderate, ticking back up as resources are deployed. Fast ramping technologies will need to double to achieve the 20% RPS standard, and triple once more off those levels to achieve a 33% standard. The CA-ISO is well aware of the need to compensate generators and is pro-actively developing capacity payment-like solutions which allow for a return on investments.
- There was a consistent belief that storage technologies will materialize within the next decade. We note PCG recently submitted an application at the CPUC to initially explore further pumped storage. All 3 agencies noted this could substantially limit the need to build further conventional generation to backup renewable deployment.
- Forward capacity market. Based on our meetings with both the CEC and the CPUC, we believe a forward capacity market is not likely to be implemented in California anytime soon. Our sense is that the CPUC doesn't want to cede supply control.

Takeaways from our trip to Calpine's Geysers plants

■ Geysers expansion program on track. We also visited Calpine's Geysers geothermal facilities north of San Francisco. We believe development remains on track for expansion of its steam production - having completed all 13 wells - and CPN remains on track to meet the 5% capex criteria by year end 2011 to qualify for the Convertible ITC grant (30% if CPN opts to develop a new site; 10% if it opts to expand existing site with added steam). Mgmt confirmed our suspicions that the Glass Mountain development remains a longer term aspiration.

Statement of Risk

Risks for Utilities and Independent Power Producers (IPPs) primarily relate to volatile commodity prices for power, natural gas, and coal. Risks to IPPs also stem from load variability, and operational risk in running these facilities. Rising coal and, to a certain extent, uranium prices could pressure margins as the fuel hedges roll off merchant generators. Further, IPPs face declining revenues as in the money power and gas hedges roll off. Other non-regulated risks include weather and for some, foreign currency risk, which again must be diligently accounted in the company's risk management operations. Major external factors which affect our valuation, are environmental risks. Environmental capex could escalate if stricter emission standards are implemented. We believe a nuclear accident or a change in the Nuclear Regulatory Commission/Environment Protection Agency regulations could have a negative impact on our estimates. Risks for regulated utilities include the uncertainty around the composition of state regulatory Commissions, adverse regulatory changes, unfavorable weather conditions, variance from normal population growth, and changes in customer mix. Changes in macroeconomic factors will affect customer additions/ subtractions and usage patterns.

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|-----------------------|-----------------|-----------------------|--------------------------|
| Buy | Buy | 51% | 37% |
| Neutral | Hold/Neutral | 40% | 33% |
| Sell | Sell | 9% | 22% |
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| Buy | Buy | less than 1% | 20% |
| Sell | Sell | less than 1% | 0% |

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1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3:Percentage of companies under coverage globally within the Short-Term rating category.

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Source: UBS. Rating allocations are as of 30 September 2010.

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|-----------------------|---|
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| Neutral | FSR is between -6% and 6% of the MRA. |
| Sell | FSR is > 6% below the MRA. |
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Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

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UBS Securities LLC: Jim von Riesemann; Julien Dumoulin-Smith; David Eads.

Company Disclosures

| Company Name | Reuters | 12-mo rating | Short-term rating | Price | Price date |
|---|---------|--------------|-------------------|-----------|-------------|
| Calpine Corporation ^{2, 4, 5, 6a, 6b, 7, 13, 16} | CPN.N | Buy | N/A | US\$12.62 | 08 Dec 2010 |
| Public Service Enterprise Group ^{5,} ^{6b, 7, 16} | PEG.N | Buy | N/A | US\$31.13 | 08 Dec 2010 |
| Wisconsin Energy Corp. ^{5, 16} | WEC.N | Buy | N/A | US\$58.67 | 08 Dec 2010 |

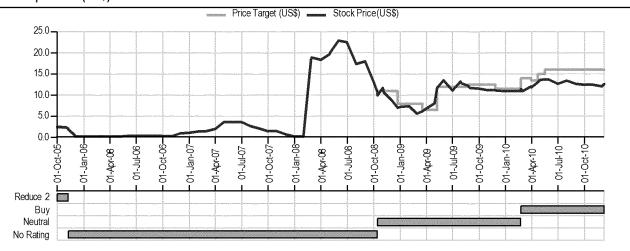
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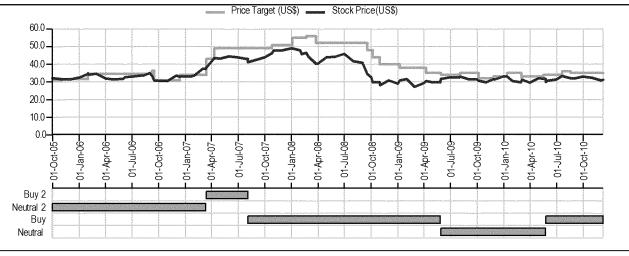
Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.



Calpine Corporation (US\$)

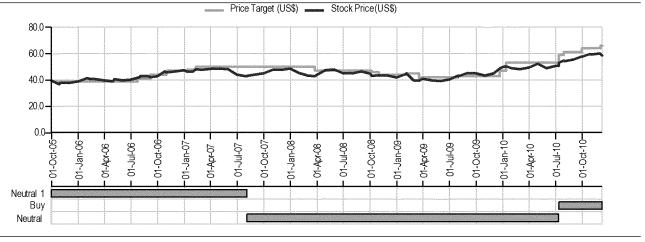
Source: UBS; as of 08 Dec 2010

Public Service Enterprise Group (US\$)



Source: UBS; as of 08 Dec 2010

Wisconsin Energy Corp. (US\$)



Source: UBS; as of 08 Dec 2010

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