I. Update on FERC, CAISO, CPUC, Transmission, and Other Related Activities

Electric Industry Market Design in California

The California Independent System Operator (CAISO) filed the Market Redesign & Technology Upgrade (MRTU) tariff with the Federal Energy Regulatory Commission (FERC) on February 9, 2006. In this filing the CAISO requested an implementation date of November 1, 2007. Interventions were due April 10, 2006, with reply comments due by May 1, 2006. Palo Alto has made comments via interventions made by the Bay Area Municipal Transmission Group (BAMx), the Northern California Power Agency (NCPA), the California Municipal Utilities Association (CMUA), and the Transmission Agency of Northern California (TANC).

The implementation delay until November 2007 postpones CPAU’s exposure to congestion costs and marginal losses until FY 2007/2008. It also means that the NP15 delivery point for CPAU’s forward contracts will remain in effect during summer 2007. The following policy issues remain a focus for the City and were addressed in the intervention and protest by BAMx:

Congestion Revenue Rights (CRRs): A key element of the proposed market design is the use of CRRs as a hedge against congestion costs. BAMx protested that: 1) The CRR proposal is deficient in that it does not include long-term firm, physical transmission rights, which are necessary for long-term resource planning; and 2) The CAISO has failed to conduct a comprehensive study of the efficacy of CRRs and consequently is unable to quantify the economic impact of the proposal on market participants. Staff and consultants will continue to advocate for long-term firm, physical transmission rights.

Load Aggregation Prices (LAPs): Currently there are three LAPs proposed, covering the service territories for each of the three large investor-owned utilities (IOUs) in California. This proposal for LAP design means that Palo Alto load would pay a load-weighted average of all the nodal prices in PG&E’s service territory rather than an (expected higher) nodal price in the congested Bay Area. Although the CAISO is proceeding with the 3-LAP design for MRTU Release 1, FERC continues to push for further disaggregation of the LAPs, and there are attempts by the CAISO to carve load following Metered Subsystems (MSS) out of the LAP. The BAMx protest reiterated that the 3-LAP design addresses equity issues for municipal utilities embedded in load pockets in an IOU’s service territory. Staff and consultants will continue to monitor and intervene in this issue.

Resource Adequacy Requirements (RAR) and Local Area Reliability Needs (LARN): Of particular interest to the City are implementation of RAR and local area reliability requirements for MSSs. Although addressed in the MRTU tariff filing, the CAISO has made separate interim tariff filings to implement a resource adequacy program and local reliability needs assessment by June 2006, in advance of MRTU implementation. On March 13, 2006, the CAISO filed an Interim Reliability Requirements Program Amendment to the CAISO Tariff (Interim Tariff Amendment) that imposes RAR on Load Serving Entities (LSEs). In an unexpected turn around from the CAISO’s previously stated intent to exclude NCPA members, the Interim Tariff Amendment will require the
City’s electric utility to show that it has sufficient electric capacity to serve its forecasted electric demand plus a “planning reserve margin”. This tariff amendment, if approved by FERC, will require the City to formally adopt a resource adequacy program prior to May 12, 2006 or be governed by the CAISO’s default provisions under the FERC-enforced tariff. Default provisions that defer to the rules developed by the California Public Utilities Commission (CPUC) for their jurisdictional utilities. This outcome would remove aspects of local control over the City’s resource planning and asset utilization, as well as expose the electric utility to the uncertainties associated with the developing CAISO and CPUC requirements.

At its March 27, 2006 meeting, the NCPA Commission approved a resource adequacy program and recommended that each of its member-city governing boards or Councils adopt the same or similar program. Staff is requesting Council approval of a similar Interim Electric Utility Resource Adequacy Program (Interim ERAP) for the City. Under current hydro conditions there is no incremental cost in the coming fiscal year associated with adopting this Interim ERAP because the current load and resource balance forecast predicts a system capacity surplus above the proposed 15% planning reserve margin.

On March 31, 2006, the CAISO and other parties filed an “Offer of Settlement” with FERC regarding a complaint brought by the Independent Energy Producers Association (IEP). In its complaint IEP had proposed that the current FERC ordered must-offer obligations on generators be replaced by a Reliability Capacity Services Tariff (RCST). If FERC approves the “Offer of Settlement” the CASIO will file an amendment to its tariff that will impose local reliability requirements (or the cost responsibility thereof) on all LSEs. Current studies indicate that these rules may cost the City $4.3 million per year in the long run and a portion of these costs could be imposed on the City this summer, depending on final regulations. The current and upcoming budget contains provisions to cover such a contingency.

Transmission and Other Related Activities
Exploratory efforts continue to assess the feasibility of having a second point of transmission interconnection to the City and to connect to the CAISO grid at 230 kV. Council will consider a recommendation to approve a PG&E Facilities Study Plan to evaluate the feasibility of upgrading the present 115 kV transmission line from the PG&E Ravenswood substation to 230 kV. The study is expected to be completed in summer and is expected to cost $200,000.

II. Western Area Power Administration (Western) Issues & LEAP Update
Western Post-2004 Operations
Staff from Palo Alto and NCPA is assisting with exploration and development of better resource utilization tools and strategies including monitoring reservoir operations and making suggestions, suggesting changes in unit loading, and changes in reserve provision activities as well as marketing a new non firm product from machines that may be called upon for reserves.

Reclamation held reservoirs at relatively high levels in late March (close to the flood control curve limits). Many small storms raised reservoir levels to encroach 30% across the flood storage space and Reclamation went into round-the-clock generation plus bypass of 3 to 5 times as much water as
Attachment C – Quarterly Electric and Fiber Issues Update could go through the generators. The bypass may end in mid April and generation may decline to normal levels at that time.

Western Base Resource Forecasting Process
During the months of January through March, hydro runoff forecasts have been increasing as the ground became saturated and the snow pack built to 140% of average. This has impacts on water management models, water release decisions and on the monthly and annual amounts of net generation available. A history of rolling 12-month forecast is shown in Figure 1 below.

Western Base Resource - Rolling-12 Month Forecast

![Western Base Resource - Rolling-12 Month Forecast](image)

**Figure 1**

Hydro Hedging
Staff has temporarily suspended efforts to hedge hydro risk. CVP and Calaveras reservoirs are above average storage levels and most likely will be managing fill and spill into June. April-July runoff is projected at 125-135% of average if normal precipitation occurs for the rest of the season.

CVP Corporation Activities
No recent CVP Corporation activities related to Western Base Resource for the quarter. CVP Corp. continues to explore the potential to acquire Calpine’s Sutter Plant. Palo Alto is participating in the initial exploration phase, but does not expect to participate in subsequent phases and does not have any further interest in the project.
Long Term Electric Acquisition Plan (LEAP) Implementation Update
The Ameresco Half Moon Bay (2.8 to 6.7 MW to Palo Alto) and Keller Canyon (1.4 to 2.1 MW) landfill gas projects are in the air-permitting and interconnection study phases, expected to come online in late 2006 to early 2007. The PPM Shiloh Wind project has made up time from the construction delays that had impacted the project, and the City has received official notice that it will start delivering wind power to Palo Alto on June 1. Palo Alto’s share will be 25 MW of the total project capacity of 150 MW.

Consistent with the revised LEAP Implementation Tasks approved by Council on April 17, staff is exploring customer-sited small-scale clean distributed generation/cogeneration consistent with City goals and policies. Initial efforts will focus on a potential pilot project with Roche Palo Alto, who is the most actively interested large customer with a thermal load that is appropriate for making optimal use of combined heat and power. Cogeneration is a potentially significant contributor to both Palo Alto’s and Roche’s resource conservation efforts, due to the very high overall energy conversion efficiencies and low net emissions achievable by systems combining production of heat, power and cooling. The cogeneration approach may also enable Roche to more effectively meet corporate sustainability goals of eliminating electric chiller-based refrigeration from its facilities.

Market Prices
Wholesale forward power prices have dropped since last quarter, but continue to be relatively high. Northern California on-peak strip price for calendar year (CY) 2007 is currently trading at close to $82 per megawatt hour (MWh), down $5 per MWh from the CY 2007 price reported in the last quarterly report. The current price for CY 2007 is 73% more than the average strip price for CY 2003. Second quarter 2006 on-peak prices are expected to be $50-53/MWh. Figure 2 shows 2005 to 2009 calendar year strip forward prices for Northern California. Figure 3 shows historical and projected monthly forward prices for Northern California.

Figure 2
Forward Prices for Northern California
On-Peak Electricity*

*This “strip” product is for energy delivered on all on-peak hours for a calendar year
Load and Resource Balance
Generation from Western Base Resource and Calaveras are projected to be above average for the prompt six months due to higher than average precipitation levels. As a result, for the next six months, the electric portfolio is expected to have a surplus position of 109 GWh or 21% of load. Much of the surplus energy is expected to arrive in April 2006 through June 2006. For the prompt 12 and 36-months, the expected load resource balance is 5% surplus and 9% deficit, respectively. Figure 4 below shows the annual load-resource balance for the next three calendar years.

Staff continues to make fixed price energy purchases as part of its laddering strategy to manage price risk. For the CYs 2006 through 2008, existing fixed price forward purchases from suppliers under the Electric Master Agreements (EMA) make up ~700GWh. The Quarterly Energy Risk Manager’s report to Council provides the details of all forward transactions made.
Capacity to Meet Local Area Reliability Needs (LARN)
As discussed in Section I of this report, if local reliability requirements are imposed, NCPA members collectively have sufficient local capacity to meet the regulatory requirement. Palo Alto itself will not have sufficient local capacity and will transact with other members of NCPA based on ‘pool benefit sharing algorithm’. Palo Alto is jointly exploring opportunities with Santa Clara to acquire local capacity and has signed a Cost Sharing Agreement with Santa Clara to pursue potential opportunities.

III. Miscellaneous Legislative/Regulatory Issues Update
PG&E-Western Dispute Related to Pre-2004 Transmission Related Cost Pass-Through
In development since the last quarterly report, Western and PG&E have agreed to a black box settlement of $2.375 million. Palo Alto paid its $411,293 share as part of the February service month bill. This settlement partially alleviates a $10 million contingency facing CPAU. An outstanding claim related to Grid Management Charges (GMC), with a potential CPAU liability of $2.5 million, remains unresolved and pending an appeal that may take 2 years to resolve.

New Claim for Refunds from the IOU
In late November 2005, the state’s three investor-owned utilities and the California Electricity Oversight Board filed a claim for damages associated with sales that NCPA made in the wholesale energy market during the period from May 2000 to June 2001. Similar claims were filed with other publicly owned utilities. The parties are seeking refunds through a contractual claim made in state
court since the 9th Circuit Court of Appeals rejected the ability of FERC to order such refunds. NCPA’s legal staff will be responding to this claim.

State Legislative Bills

Assembly Bill 2021 (Levine): On April 3, 2006, the Assembly Utilities & Commerce Committee, in a 9-1 vote, approved AB 2021, which would require the CEC, in consultation with the CPUC, to develop statewide energy efficiency targets, require the CEC to set an annual target for energy efficiency for each local publicly owned electric utility to contribute proportionally to statewide efficiency targets, and authorize strict financial penalties for communities that do not meet CEC targets. The City has registered its inability to support the legislation as written. On a positive note, Chairman Levine agreed to remove a section of his bill that related to the "decoupling" of rates and revenues for public power systems, and also agreed to count efficiency upgrades that are made to existing transmission and generation facilities toward his proposed statewide goals. However, NCPA remains strongly opposed to the bill, one reason being that legislation just recently enacted into law (SB 1037 Kehoe) already requires that public power systems examine and implement all cost effective efficiency measures when making resource decisions, and report on the programs to the CEC. The City has written letters to the legislature stating its inability to support the bill as written.

Senate Bill 1 (Murray): The solar roof initiative was taken up by the CPUC, but SB 1 is on the move again to place similar requirements on publicly owned utilities.

Senate Bill 1554 (Bowen): This is a CMUA/NCPA supported bill to prohibit the imposition of exit fees on a customer of a local publicly owned electric utility if the customer's service location has not previously received service from an electrical corporation. In addition to NCPA and CMUA’s continuing push to gain support for SB 1554 in the state legislature, they are fighting numerous exit fee battles at the CPUC.

Climate Action Team Report Delivered to Governor: 04/03/2006, the state’s Climate Action Team released its first biennial report on climate change. The report contains 46 specific strategies and nine key recommendations designed to reduce greenhouse gas emissions in California. A number have implications for public power, including: 1) mandatory reporting of greenhouse gas emissions from generating facilities, 2) the requirement to have new generation come from sources with emissions no greater than new combined-cycle power plants, and 3) the requirement for public power to meet “statewide” goals for energy efficiency and renewable resources. Several of these recommendations are being debated now at the Legislature and the CEC, and Governor Schwarzenegger has stated his desire to sign several bills related to climate change this year.

Several climate action bills are active this session:

AB 32 (Pavley): This bill would enact the California Global Warming Solutions Act of 2006, to require the state board to adopt regulations on or before January 1, 2008, establishing a program to monitor and report on existing emissions and changes in emissions of greenhouse gases from sources identified by the state board, and to monitor compliance with emission limits on greenhouse gases, as specified.
AB 2321 (Canciamilla): This bill would establish the Governor's Green Action Team, consisting of at least 16 members with the primary mission of overseeing and directing progress toward reducing electricity purchases for state-owned buildings by 20% by 2015 and to achieve comparable reductions in electricity purchases for other entities of state government, for local government, for schools, and for commercial buildings.

SB 1368 (Perata): This bill would prohibit any load serving entity, including electrical corporations, community choice aggregators, electric service providers, and local publicly owned electric utilities, from entering into a long-term financial commitment for baseload generation unless that baseload generation complies with a greenhouse gases emission performance standard established by the Energy Commission, by regulation, in consultation with the PUC and the State Air Resources Board. The bill would require that the greenhouse gases emission performance standard not exceed the per kilowatthour emissions of greenhouse gases of a combined-cycle natural gas powerplant. The bill would authorize the Energy Commission to adopt regulations for the enforcement of the greenhouse gases emission performance standard with respect to a local publicly owned electric utility.

Federal Bills
No update from last quarter.

IV. Telecommunications Update
Fiber Optics*
The new rate structure is on track to be implemented as an alternative to the existing rate structure beginning in July. The old rate structure will be slowly phased out.

Staff is working with the Attorney’s Office to develop a revised contract form that is more commercially oriented.

Fiber To The Home (FTTH)
The FTTH Trial Customer Premise Equipment (CPE) units are being removed from the trial homes. The overhead cables are being left in place for use by dark fiber or any future FTTH effort.

* See end of Attachment C for Dark Fiber Operations Statement of Income prepared by the Administrative Services Department.

V. Electric Public Benefits Program
Renewable Programs
PV Partners
Staff is working with Public Works and the Planning Department to manage the City Photovoltaic Demonstration project at Baylands, Cubberley and the Municipal Services Center (MSC). This $2.8 million project, co-funded through a Federal DOE grant, will install approximately 250 kilowatts of photovoltaic systems at the three sites. The design is 90% completed for the Baylands and Cubberley sites. The MSC tracker project was approved by Council in February.

<table>
<thead>
<tr>
<th>PV Partners Installations</th>
<th>Number of Systems</th>
<th>Peak kW</th>
<th>Rebates</th>
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<tr>
<td>Q3 Installations (1/1 – 3/31/06)</td>
<td>13</td>
<td>42</td>
<td>$129,865</td>
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PaloAltoGreen (PAG)
As of April 5, 2006, PaloAltoGreen (PAG) had approximately 3,917 active participants or 14.24% of all electric accounts. From January 1, 2006 through March 31, 2006, PAG had a net gain of 179 new sign ups or 4% of the total. PAG became the number one ranked renewable energy program in the nation based on the percentage of utility customer enrollment. This is the first time that PAG has achieved the “first in the nation” status. PAG customers consumed 3,425,483 kWh in January 2006, or 2.0% of total citywide sales for that month. PAG continues to strive for its goal of 15% community participation rate by June 2006.

<table>
<thead>
<tr>
<th>PaloAltoGreen consumption by customer class</th>
<th>kWh Sold</th>
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<tr>
<td>Residential (E1G &amp; E2G)</td>
<td>2,736,483</td>
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<tr>
<td>Medium &amp; Large customers (E4G &amp; E7G)</td>
<td>689,000</td>
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<td>Total PAG Energy</td>
<td>3,425,483</td>
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Energy Efficiency Programs (for the period 01/01/2006 to 03/31/2006)

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<th>Residential and Commercial Efficiency Programs to date</th>
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<tr>
<td>Residential Program</td>
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<td>Low Income Program</td>
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<tr>
<td>Right Lights Program</td>
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<tr>
<td>Commercial Consultant Studies</td>
</tr>
<tr>
<td>Commercial Advantage Program</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Small Business Lighting Retrofit Program (Right Light Palo Alto)
This pilot program was implemented as an attempt to target a specific customer group, the E2 rate class of small businesses, which has been underserved through the public benefits program. The pilot program set target goals of serving 32 businesses and reducing their electrical consumption by 64 kW and 320,000 kwh with a total budget of $80,000. As the pilot program nears completion, 40 businesses have participated, with reported electric savings totaling 75 KW and 375,271 kWh, respectively. Due to the success of the pilot program, staff has issued an RFP to expand the Small Commercial Lighting Retrofit into a full program, with funding estimated to be $250,000. The new program is targeted to begin early next fiscal year.

Low Income Programs
Residential Energy Assistance Program (REAP)
Beginning November 1, 2005 the new low-income program REAP was fully implemented. This program will provide qualifying applicants with an energy audit to identify potential utility cost
savings and installation of energy efficient items including home weatherization, diagnostic testing, minor plumbing, electrical repairs, weather stripping, insulation, and other energy efficiency improvements. The program includes installation of ENERGY STAR furnaces, refrigerators and water heaters, compact fluorescent lighting, and low flow plumbing devices. To date, 20 qualified residents have received energy audits and have their homes upgraded through the program. The program has received a very positive response from customers. The energy savings from these measures will be included in upcoming quarterly reports.

VI. **Key and Major Accounts**
The Crowne Plaza Cabana Hotel has completed the installation of the rooftop 45kw photovoltaic system that was turned on March 30, 2006. The owner BB Patel is also installing smaller systems on his other properties.

The installation of the GeoExchange Demonstration Project is complete and staff is collecting data to analyze the efficiency of the two technologies. The final analyses and report will be completed by January 2007.

VII. **Operations Update**
The three attached graphs showing operational performance measures for FY 05-06 to date (July through March 2006):
1. Electric Service Interruptions – FY 05-06 (number and types of outages)
2. Electric Service Interruptions – FY 05-06 (average minutes per customer affected)
3. Electric Service Interruptions – FY 05-06 (minutes per customer per year)
Electric Service Interruptions FY 05/06

- Overhead
- Underground
- Other
- Storm

Outages

- July
- Aug
- Sep
- Oct
- Nov
- Dec
- Jan
- Feb
- Mar
- Apr
- May
- Jun

Electric Service Interruptions

0 2 4 6 8 10 12 14 16

July Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
Electric Service Interruptions FY 05/06

Averae Minutes per Customer Affected

Goal - 120 minutes per customer

All outage data

Does not include storms
Electric Service Interruptions FY 05/06

Goal: 60 minutes per customer per year

Minutes per Customer

July Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

Does not include storms

All outage data

0 0 0 0 0 2

13 40 43 55 56
### CITY OF PALO ALTO
2005-06 MIDYEAR Q3 FINANCIAL REPORT FIBER OPTIC FUND
(in thousands of dollars)
Draft As of 3/29/06

#### UNAUDITED

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<td>Interest Income</td>
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<td>Other Income</td>
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#### Uses of Funds

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<td>-</td>
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