Summary Title: Change Purpose of the Calaveras Reserve

Title: Utilities Advisory Commission Recommendation to Change the Purpose of and Rename the Calaveras Reserve to the Electric Special Project Reserve and Adopt New Reserve Guidelines

From: City Manager

Lead Department: Utilities

Recommendation

Staff and the Utilities Advisory Commission (UAC) recommend that the Finance Committee recommend that Council:

1. Change the purpose of the Calaveras Reserve from partially funding above market electric costs and partially funding projects that benefit electric ratepayers to entirely funding projects that benefit electric ratepayers;

2. Specify that the $2 million from the Calaveras Reserve that was made available to provide loans for energy efficiency projects for business customers will be repaid to the Electric Supply Rate Stabilization Reserve;

3. Rename the Calaveras Reserve as the Electric Special Project (ESP) Reserve; and

4. Adopt the following ESP Reserve guidelines:
   a. The purpose of the ESP Reserve is to fund projects that benefit electric ratepayers;
   b. ESP Reserve funds are to be used for projects of significant impact and not to offset operating costs and/or reduce rates in the short-term;
   c. Projects proposed for funding must demonstrate a need and/or value to electric ratepayers. The projects must be cost-effective and not be speculative, or risky, in nature;
   d. Projects proposed for funding must be substantial in size, requiring funding of at least $1 million;
e. Commitment of all funds in the ESP Reserve shall be determined by end of fiscal year (FY) 2015; and

f. Any uncommitted funds remaining at the end of FY 2020 will be transferred to the Electric Supply Rate Stabilization Reserve and the ESP Reserve will be closed.

Executive Summary

Since the Calaveras Reserve was first established 28 years ago, Council has changed its purpose and use several times as a result of changing market conditions, risk of stranded costs and future cost uncertainties. While the purpose and deployment of funds has changed, the Calaveras Reserve has always been maintained for benefit of the Palo Alto’s electric ratepayers.

Palo Alto electric ratepayers are facing the prospect of several large expenses over the next few years related to several initiatives. Specifically, transmission upgrades, redundant electric supply, and the deployment of smart grid technologies are being evaluated and plans to invest in such areas to improve value to Palo Alto electric customers will be developed in the coming years.

The Calaveras Reserve’s estimated FY 2012 ending balance is approximately $50 million. Changing the purpose the Calaveras Reserve to be used exclusively to fund special projects and adopting the proposed ESP Reserve Guidelines will help ensure prudent and fair use of the funds and will provide a greater certainty in planning for long-term investments on behalf of Palo Alto’s electric ratepayers.

Background

The Calaveras Reserve was first established in 1983 to help defray costs associated with the Calaveras Hydroelectric Project. Council changed the purpose of the Calaveras Reserve in 1996 (CMR: 214:96) and authorized collections from electric ratepayers to cover the amount that certain electric assets’ costs were projected to be above their value, or “stranded”, in anticipation of electric deregulation in 1998 and the threat of customers choosing electricity suppliers other than the City. In addition, Council approved a new Calaveras Reserve policy linking the reserve balance to an amount sufficient to cover potential stranded costs.

In 2009, Council approved a new set of guidelines to manage the Calaveras Reserve which included setting the minimum transfer to the operating budget based on an annual calculation of short-term stranded costs; the annual calculation of long-term stranded cost; and the identification of funds available for special projects to the benefit of electric ratepayers.
Discussion

The existing Calaveras Reserve Guidelines do not provide certainty and/or clear direction with regards to the amount of funds available in the future for special projects versus the amount to be used to cover short-term stranded costs. On July 20, 2011 staff recommended that the UAC recommend to Council a slight modification to the existing Calaveras Reserve guidelines to clarify the amount of the funds to be used to cover stranded costs and the amount of funds to be reserved for projects. The staff report to the UAC describing the proposal and providing additional details is provided as Attachment A. Staff’s proposal included splitting the existing Calaveras Reserve into two reserves with approximately half of the funds to be used to offset above market costs associated with the Calaveras Hydroelectric Project and the other half to create the ESP Reserve to be used to fund projects to benefit electric ratepayers.

The UAC argued that the funds were better spent for special projects, rather than being used to cover the above market costs of the Calaveras Hydroelectric Project. Staff subsequently decided to change its proposal and supports the UAC’s recommendation to reserve all funds in the Calaveras Reserve for special projects. Staff’s reasons for changing its original recommendation to the UAC include:

1. There are large, impactful, and expensive projects that are looming for the Electric Fund such as a second transmission interconnection and smart grid components, which together could cost more than the amount in the Calaveras Reserve. The availability of these funds to pay for the improvements would obviate the need to raise rates or issue bonds to finance them.

2. The proposal still requires that the projects benefit electric ratepayers. Thus, electric ratepayers who funded the reserve will receive the benefits of the collected funds.

3. Palo Alto’s electric rates are already some of the lowest in the state.

4. Transfers from the Calaveras Reserve are not needed to avoid rate increases and/or to stay within Council approved rate objectives, as the Electric Rate Stabilization Reserve is substantial and can be used to offset the need for rate increases over the next 3-5 years.

Commission Review and Recommendation

Staff presented its recommendation to the UAC at its July 20, 2011 meeting. The UAC indicated its support to improve clarity in planning and the use of Calaveras Reserve funds. However the UAC did not support staff’s recommendation to retain some funds to offset above market costs and, instead, proposed that all funds be used for special projects to the benefit of electric ratepayers along with a set of guidelines to manage the ESP Reserve. Specifically, the UAC offered the following set of guidelines for the management of the ESP Reserve:
1. Funds should be used for projects that benefit electric ratepayers.
2. Funds should be used for projects, not to offset operating costs and reduce rates.
3. Projects should be worthwhile; that is, funds should be used for projects that would have been worth doing even if the City had to pay for them.
4. The cost of a project should be relevant and impactful. Funds should not be spent on projects that are too small and can easily be funded some other way.
5. If projects can be found that meet the above guidelines, then speed and certainty are preferred. It is better to spend the funds sooner rather than later. Staff should examine means by which the entire funds can be spent now, and the consequences of doing so.

Additionally, the UAC proposed that: a) all the money in the Calaveras Reserve be transferred to the ESP Reserve; b) the ESP Reserve have a 2020 sunset (i.e., all money not spent by 2020 would be transferred to the Electric Rate Stabilization Reserve); and c) projects proposed for funding from the ESP Reserve be determined by the end of FY 2015.

The motion to recommend that Council move all the money in the Calaveras Reserve to the ESP Reserve, sunset the reserve by 2020 and adopt the guidelines suggested by Commissioner Eglash was unanimously approved by the UAC (6-0, with Commissioner Cook absent).

Staff’s current proposal for the management of Calaveras Reserve and the ESP Reserve is consistent with the UAC’s recommendation to use the funds exclusively for special projects to the benefit of electric ratepayers and expands on the ESP Reserves Guidelines as proposed by the UAC.

The draft minutes of the UAC’s July 20, 2011 meeting are provided as Attachment B.

**Next Steps**

Staff is evaluating potential projects which may receive ESP Reserve funding including investments in transmission upgrades and advanced metering infrastructure (AMI).

Staff is assessing the merits and feasibility of an electric transmission interconnection between the City and the SLAC National Accelerator Laboratory (SLAC). The project would extend two new 60 kilovolt (kV) underground lines from SLAC’s substation to the City’s Quarry substation. These underground cables would follow different paths and would be sized to carry Palo Alto’s entire load during an emergency. This project would increase reliability for SLAC and the City.
by providing redundant transmission and reduce the City’s cost of transmission service. Preliminary project cost estimates are around $40 million. Staff is working with interested parties, but has to coordinate with SLAC, Stanford, the Department of Energy, and the California Independent System Operator. An update on the status of the project should be available by early 2012.

As an alternative, Palo Alto and PG&E have developed a backup plan to provide a fourth 115 kV transmission line to the City. This plan would extend a 115 kV line from Ames Substation to Adobe Creek Substation on existing PG&E towers at an estimated cost of $10 million. The alternative plan would not provide any transmission service cost relief to the City.

AMI is one of the building blocks for a “smart grid”. It provides the interface between the customer and the utility and could lead to improved demand-side load management, outage response, customer satisfaction, efficiency of operations, and reduced system losses. Recently, staff retained a consultant to provide a smart grid road map, with recommendations on how to move forward. The consultant’s assessment found that there was no compelling reason to make major investments to implement smart grid in the City in the near future. The consultant recommended that the City undertake a number of intermediate steps in the next 2-3 years to better position the City to implement the smart grid road map. Undertaking the intermediate projects in the next 2-3 years is preliminarily estimated to cost up to $500,000. The assessment also found the total cost of implementing smart grid applications will require an investment of $16 million for electric, natural gas, and water services.

**Resource Impact**

Changing the purpose of the Calaveras Reserve and adopting the proposed guidelines will impact electric rates in the short term by ceasing the annual transfers from the Calaveras Reserve. The impact on rates for those transfers is equal to a one-time rate increase of about 2.5%. However, the funds will remain in the Electric Fund to be used to benefit electric ratepayers and will eventually be used to fund worthwhile projects, which would have been funded from either the sale of bonds, or a rate increase. Therefore, over the long term, there is no impact on electric rates from the recommended action. Requests for future expenditures for projects from the proposed new ESP Reserve require Council approval.

**Policy Implications**

Evaluating the need for and purpose of the Calaveras Reserve is an initiative in the 2011 Utilities Strategic Plan. The proposed new ESP Reserve and guidelines would replace the current Council-approved Calaveras Reserve guidelines.
Environmental review

Approval of the ESP Reserve and Guidelines does not meet the definition of a project pursuant to Public Resources Code Section 21065, thus no California Environmental Quality Act review is required.

Attachments:

- Attachment A: July 20, 2011 Memo to UAC on Proposed Modifications to the Calaveras Reserve (PDF)
- Attachment B: DRAFT Excerpted UAC Minutes of July 20, 2011 (PDF)
MEMORANDUM

TO: UTILITIES ADVISORY COMMISSION
FROM: UTILITIES DEPARTMENT
DATE: JULY 20, 2011
SUBJECT: Recommend Proposed Modifications to the Calaveras Reserve Guidelines and Establishment of the Electric Special Projects Reserve

REQUEST
Staff recommends that the Utilities Advisory Commission (UAC) recommend that Council approve a change to the Calaveras Reserve guideline and the establishment of a new reserve with funds from the existing Calaveras Reserve. Specifically, staff recommends:

1. Transfer $25.114 million from the Calaveras Reserve to establish a new Electric Special Project (ESP) Reserve to be used to help fund future projects to the benefit of electric ratepayers and/or to offset future electric rate increases.

2. Change the Calaveras Reserve Guidelines to:
   a. The purpose of the Calaveras Reserve is to offset above market costs related to the Calaveras Hydroelectric Project; and
   b. Each year as part of the budget process, transfer a fixed amount from the Calaveras Reserve to the Electric operating budget as provided for in Schedule of Calaveras Reserve Transfers (Attachment A) until the reserve is exhausted in Fiscal Year (FY) 2024.

3. Approve the ESP Reserve Guidelines as follows:
   a. ESP Reserve funds may be used to fund projects to the benefit of electric ratepayers and/or to offset Electric Utility operating costs and potential rate increases;
   b. Staff will work with the UAC to identify and recommend projects for funding from the ESP Reserve for Council consideration and approval;
   c. Staff will report annually to the UAC and Council the identification of new projects to be funded and/or the status of existing projects funded through the ESP Reserve; and
   d. Any funds remaining in the ESP Reserve at the end of FY 2020 will be transferred to the Electric Supply Rate Stabilization Reserve and the ESP Reserve will be closed.

BACKGROUND
In 1983, the City Council established the Calaveras Reserve in the electric fund to help defray a portion of the annual debt service costs associated with the Calaveras Hydroelectric Project “Calaveras Project”, which was put in service at that time. As originally established, the
Calaveras Reserve policy did not provide for a target balance and depletion of the reserve was anticipated by 2032.

California Assembly Bill 1890 was adopted in 1996, which provided for the deregulation of California’s electric industry effective January 1, 1998. A key element of deregulation was the provision for “Direct Access,” which would allow electric customers to choose their electric commodity supplier. The City of Palo Alto Utilities (CPAU), along with other California utilities, was faced with the prospect of losing customers and load to Direct Access and being left with expensive generation assets already purchased or built to serve these customers. In response to such risk, Pacific Gas and Electric Company and other investor- and municipally-owned utilities established stranded cost surcharges to collect funds from ratepayers to cover the amount that these uneconomic assets were projected to cost above their market value in the future (i.e., “stranded cost”).

Consistent with the threat of Direct Access, Council changed the purpose of the Calaveras Reserve in 1996 (CMR: 214:96) and authorized collections from electric ratepayers to cover the amount that certain electric assets’ costs were projected to be stranded. In addition, Council approved a new Calaveras Reserve policy linking the reserve balance to an amount sufficient to cover potential stranded costs. The assets identified as stranded included the Washington Water Power contract, the Seattle City Light Exchange contract, the Calaveras Project, and the California-Oregon Transmission Project (COTP). When the Calaveras Reserve balance reached $71 million in 1999, stranded costs were deemed fully collected. At that time, Council ceased collecting funds for these stranded costs and established the Calaveras Reserve Target and Guidelines (CMR 222:99) with a schedule to draw down the funds through the end of FY 2033. The schedule was designed to transfer an amount sufficient to cover stranded costs each year into the electric fund’s operating budget.

To address changing market conditions including the reduced risk of Direct Access, the expiration of the Washington Water Power contract, the long-term assignment of COTP and permanent assignment of the Seattle City Light Exchange contract, in 2009 staff provided an updated assessment of stranded cost and presented and discussed several alternatives for how to manage the Calaveras Reserve with the UAC, Finance Committee and Council.

The Finance Committee and Council recognized that the amount in the Calaveras Reserve was more than adequate to offset above market costs and that deployment of the excess reserves to fund projects which benefit electric ratepayers was both prudent and fair use of the funds. Therefore, on June 15, 2009 Council approved new guidelines for the management of the Calaveras Reserve (CMR:275:09) as follows:

1. Require the calculation of the “stranded costs” for the electric supply portfolio during the annual budget process for the upcoming budget year(s) and set the minimum transfer from the Calaveras Reserve to the Electric Supply Operating Budget equal to this amount;
2. Require the calculation of the “stranded costs” for the long-term (until 2032 when Calaveras debt is paid off) of the electric supply portfolio during the annual budget...
process and ensure that the Calaveras Reserve balance will be sufficient to cover this amount;

3. Calculate “stranded cost” based on the above market cost of the Calaveras Hydroelectric Project and the California Oregon Transmission Project; and

4. To the extent that there are funds available in excess of long-term “stranded cost” needs, staff will work with the UAC to identify and recommend projects for Council consideration and approval. Such projects shall be to the benefit of electric ratepayers.

Adhering to the Council-approved guidelines for FYs 2011 and 2012, staff assessed the short- and long-term stranded costs and recommended the minimum transfer amount from the Calaveras Reserve to the operating budget based on the short-term stranded cost calculation. During the budget process for FY 2012, the UAC recommended against staff’s recommendation to transfer the minimum amount of $5.238 million to the operating budget. Subsequently, the Finance Committee approved staff’s recommended transfer, but directed the UAC to work with staff to develop a list of potential projects to be funded from the Calaveras Reserve. Attachment B contains the excerpted notes from April 19, 2011 Finance Committee meeting.

Since approval of the Calaveras Reserve guidelines, Council has approved $2.319 million in projects to be funded through the Calaveras Reserve, including $2 million for energy efficiency loans to be repaid to the Electric Fund. Projects identified and recommended for funding via the Calaveras Reserve thus far are projects which further the City’s goals and are not considered to be operational in nature and/or are already part of long-term capital improvement, distribution and/or resource acquisition plans.

Additionally, in 2010, staff embarked on the process of updating the Utilities Strategic Plan. A thorough review of the need for and purpose of the Calaveras Reserve, including an assessment of the Direct Access threat, is an initiative under the proposed Utilities Strategic Plan.

**DISCUSSION**

**Purpose and Need for Calaveras Reserve**

Currently, the Calaveras Reserve is used to offset the cost of assets whose cost is above market value. Although the threat of Direct Access is relatively low for Palo Alto, it may increase in the future. Statewide, the threat of Direct Access is increasing as consumers demand choice. Senate Bill 695 (SB 695) which was signed into law in October 2009 lifts some of the emergency measures the legislature imposed during the 2000-01 energy crisis, including suspension of the ability for customers to choose a Direct Access electricity provider. SB 695 allows an expansion of Direct Access service for individual retail non-residential end-use customers and requires the California Public Utilities Commission to phase this in over a three to five year period. Limits were set on the maximum amount of load eligible for Direct Access for each of the three California investor owned utilities. Such limits have been fully subscribed with interest surpassing the limits indicating a strong desire by consumers for supplier choice. Further, communities across the state are looking to establish community choice aggregations (e.g., Marin Energy Authority and City of San Francisco) as a means to develop electric supply portfolios consistent with their local community’s environmental, price and/or social objectives.
The City does not currently offer Direct Access to its electric customers, nor is staff exploring the idea of offering Direct Access in the near future. Further, staff is not aware of any proposed legislation to mandate that municipally-owned utilities offer Direct Access to its customers. Since the threat of Direct Access is low for Palo Alto, the need to hold reserves to cover potential stranded cost is also low.

**Calaveras Reserve**

As part of the FY 2012 budget development process, staff calculated the stranded cost for FY 2012 of $5.238 million and the long-term stranded cost of $30.8 million. The long-term stranded cost calculation was derived by estimating the Calaveras Project’s long-term above market cost of $27.3 million\(^1\) and added $3.5 million in contingencies related to the 15-year assignment of COTP.

Staff recommends no longer including COTP contingencies in the calculation of above market costs. The probability of such contingencies materializing is minimal and may be covered using funds in the Electric Supply Rate Stabilization Reserve. Staff currently estimates the Calaveras Project’s above market cost to be $25.206 million\(^2\), which is the amount staff recommends maintaining in the Calaveras Reserve to cover the above market costs associated with the Calaveras Project. Table 1 provides a summary of the cost, value and above market cost (cost minus value) related to the Calaveras Project through FY 2032.

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1. Assumed fixed long-term debt through FY 2032; Northern California Power Agency’s forecast of fixed and variable operation and maintenance cost; Calaveras generation output at 90% of long-term average; energy and capacity value based on expected wholesale market prices in November 2010; and included a carbon free resource value adder.

2. Assumed fixed long-term debt through FY 2032; Northern California Power Agency’s forecast of fixed and variable operation and maintenance cost; Calaveras generation output at 100% of long-term average; energy and capacity value based on expected wholesale market prices in May 2011; the forward market price as of May 2011 is assumed to include the cost of carbon, therefore no carbon-free resource value adder; and assumes increased ancillary service market value going forward.
Table 1: Calaveras Hydroelectric Project Net Value ($000’s)

<table>
<thead>
<tr>
<th>Fiscal Year Ending</th>
<th>Project Cost</th>
<th>Project Value</th>
<th>Net Value (Negative numbers indicate above market cost)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>12,218</td>
<td>7,895</td>
<td>(4,322)</td>
</tr>
<tr>
<td>2014</td>
<td>12,023</td>
<td>9,140</td>
<td>(2,883)</td>
</tr>
<tr>
<td>2015</td>
<td>12,101</td>
<td>9,449</td>
<td>(2,653)</td>
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<tr>
<td>2016</td>
<td>12,189</td>
<td>9,851</td>
<td>(2,338)</td>
</tr>
<tr>
<td>2017</td>
<td>12,081</td>
<td>10,171</td>
<td>(1,910)</td>
</tr>
<tr>
<td>2018</td>
<td>12,163</td>
<td>10,400</td>
<td>(1,763)</td>
</tr>
<tr>
<td>2019</td>
<td>12,099</td>
<td>10,575</td>
<td>(1,524)</td>
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<tr>
<td>2020</td>
<td>12,193</td>
<td>10,759</td>
<td>(1,434)</td>
</tr>
<tr>
<td>2021</td>
<td>12,245</td>
<td>10,931</td>
<td>(1,313)</td>
</tr>
<tr>
<td>2022</td>
<td>12,343</td>
<td>11,115</td>
<td>(1,228)</td>
</tr>
<tr>
<td>2023</td>
<td>13,366</td>
<td>11,296</td>
<td>(2,069)</td>
</tr>
<tr>
<td>2024</td>
<td>13,259</td>
<td>11,490</td>
<td>(1,769)</td>
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<td>2025</td>
<td>7,132</td>
<td>9,971</td>
<td>2,839</td>
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<td>2026</td>
<td>7,171</td>
<td>10,270</td>
<td>3,099</td>
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<tr>
<td>2027</td>
<td>7,212</td>
<td>10,578</td>
<td>3,366</td>
</tr>
<tr>
<td>2028</td>
<td>7,255</td>
<td>10,895</td>
<td>3,640</td>
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<td>2029</td>
<td>7,299</td>
<td>11,222</td>
<td>3,924</td>
</tr>
<tr>
<td>2030</td>
<td>7,341</td>
<td>11,559</td>
<td>4,218</td>
</tr>
<tr>
<td>2031</td>
<td>7,381</td>
<td>11,906</td>
<td>4,524</td>
</tr>
<tr>
<td>2032</td>
<td>7,424</td>
<td>12,263</td>
<td>4,839</td>
</tr>
<tr>
<td><strong>Total for FY 2013 through FY 2024</strong></td>
<td></td>
<td></td>
<td><strong>(25,206)</strong></td>
</tr>
</tbody>
</table>

Attachment A, the proposed schedule for the Calaveras Reserve Balance, is a fixed schedule of transfers from the Calaveras Reserve to the Electric Fund’s operating budget, based on the Calaveras Project’s annual above market cost, as shown in Table 1. The schedule in Attachment A shows transfers for FY 2013 through FY 2024, the years when the Calaveras Project’s costs are above market value. If the proposed schedule is followed, after FY 2024, the Calaveras Reserve will be exhausted and will be closed.

The estimated FY 2011 ending balance for the existing Calaveras Reserve Fund is $55.558 million. Given the $5.238 million transfer to the Electric Supply Operating budget in FY 2012, the projected Calaveras Reserve ending balance for FY 2012 is $50.320 million. Provided the recommended $25.206 million is held in the Calaveras Reserve, then $25.114 million is available to establish the new ESP Reserve.

Staff recommends that the above market costs be frozen at the amounts shown in Table 1 and not be revisited or readjusted annually as provided for in the current Calaveras Reserve guidelines. This fixed schedule will provide certainty about the disposition of the funds and clearly shows how and when the funds previously collected from ratepayers are returned to them in the form of reduced Electric Fund costs going forward.
Electric Special Project (ESP) Reserve

Staff recommends $25.114 million be set aside in the ESP Reserve to fund projects to the benefit of electric ratepayers. Staff also proposes within the recommended ESP Reserve guidelines, the flexibility to utilize ESP Reserves to offset any large increases in electric operating costs, which may necessitate a rate increase outside of certain electric rate objectives. Any such recommendation will be identified during the annual budget process and subject to UAC recommendation and Council approval.

Last, the recommended ESP Reserve includes a sunset date of June 30, 2020 to ensure that the funds are not maintained indefinitely without returning the funds to the ratepayers who provided them. Any remaining funds after that date are to be transferred to the Electric Supply Rate Stabilization Reserve, or replacement fund, for the benefit of electric ratepayers. As part of the recommended guidelines, staff will report annually to the UAC and Council on progress in identifying and funding projects to ensure deployment of funds.

Projects Considered for Funding from the Calaveras or ESP Reserve

Staff first reviewed potential projects for funding from the Calaveras Reserve with the UAC in November 2008 when it held a study session on potential uses of the Calaveras Reserve as staff was evaluating changes to the reserve guidelines. On January 12, 2009, Council directed staff to work with the UAC to review possible projects that would benefit electric ratepayers for consideration of funding from the calculated “excess” Calaveras Reserve Fund (CMR: 110:09). That direction was also incorporated into the Calaveras Reserve guidelines, which were adopted in June 2009.

At the UAC’s May 2009 meeting, staff evaluated a number of potential projects as candidates for funding from Calaveras Reserve funds. Typical capital projects such as system improvement projects, undergrounding, distribution system upgrades, and control system upgrades were not considered. Based on the May 2009 assessment, staff determined that three projects were the best projects for funding at that time:

1. Investment to implement advanced metering infrastructure (AMI);
2. Investment and incentives for local generation and cogeneration projects within the City; and
3. Investment to upgrade the City’s transmission line connection.

Staff recognizes the potential for additional expenditures related to major projects which may materialize as a result of several studies, strategic initiatives and/or City endeavors including:

- The Smart Grid Strategic Plan;
- Utilities Strategic Information Technology Plan;
- Electric transmission interconnection improvements;
- Emerging Technology Program Innovation Fund; and
- New service center for Utilities (and other related) services if the Municipal Service Center is no longer available
The exact magnitude, feasibility and/or need for expenditures related to the above mentioned initiatives is not yet known, but several of these projects could cost in the tens of millions of dollars. For example, staff’s initial estimate related to Smart Grid includes $10 to $15 million for installation of 29,000 smart meters alone and costs related to electric transmission interconnection improvements could be over $40 million. A summary of potential projects that could be considered for funding from the reserve are described in more detail in Attachment C.

Since the current Calaveras Reserve guidelines were approved in June 2009, Council has approved $2.545 million in funding from the Calaveras Reserve for four projects. Table 2 is summary of these projects.

Table 2: Projects Approved for Funding from the Calaveras Reserve ($000)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Local generation PLUG-IN Program</th>
<th>Smart Grid Feasibility Study</th>
<th>Energy/Compost Feasibility Study</th>
<th>Energy Efficiency Financing Program</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$200</td>
<td>$70</td>
<td>$2,000</td>
<td>$2,270</td>
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<tr>
<td>2011</td>
<td>$200</td>
<td>$75</td>
<td>$75</td>
<td>$275</td>
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<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td>$0</td>
<td></td>
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<tr>
<td>Total Approved</td>
<td>$400</td>
<td>$70</td>
<td>$75</td>
<td>$2,000</td>
<td>$2,545</td>
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<tr>
<td>Total Expended</td>
<td>$0</td>
<td>$70</td>
<td>$49</td>
<td>$2,000</td>
<td>$2,119</td>
</tr>
</tbody>
</table>

**Alternatives Considered**

Staff considered several alternative strategies for managing the existing Calaveras Reserve including maintaining the current set of guidelines. Staff’s main concern for continuing with the current set of guidelines is lack of clarity of whether the reserve is intended to offset short-term above market cost, should be maintained to cover future stranded cost, or held to fund future projects. Such lack of clarity makes it difficult for staff to determine how much funding will come from the Calaveras Reserve to offset operating costs and therefore may cause delays in recommending electric rates, operating budgets and financial plans.

In addition, since the guidelines require recalculation of the long-term costs annually, there is uncertainty about how much funds are available for special projects, which makes it difficult to plan for such projects.

Staff also considered alternatives for calculating the above market cost of the Calaveras Project. One alternative is to continue the annual calculation with the budget process, as in the current guidelines. Another alternative is to implement an end-of-year true-up of the Calaveras Reserve transfer based on actual above market cost for the Calaveras Project. Staff’s recommendation ceases the annual calculations, fixes the annual transfer amounts, and sets a date for the when the reserve closes, all of which provide financial certainty for the Electric Fund and clarity for ratepayers.
NEXT STEPS
Staff plans to take the proposed guidelines to the Finance Committee for consideration in September 2011 and, depending upon the recommendation from the Finance Committee, seek Council approval in October 2011.

RESOURCE IMPACT
Creating a new reserve from funds in the current Calaveras Reserve and adoption of the proposed guidelines will not result in a direct impact on existing resources. Resources will be impacted as specific projects are funded using Calaveras and/or ESP Reserves. Approval of requests for expenditures from either the existing Calaveras Reserve or the proposed new ESP Reserve requires Council approval at the time of the request.

POLICY IMPLICATIONS
Evaluating the need for, and purpose of, the Calaveras Reserve is an initiative in the Utilities Strategic Plan. If staff’s recommendation is adopted by the Council, the proposed new guidelines would replace the current Council-approved Calaveras Reserve Guidelines.

ATTACHMENTS
A. Schedule for Calaveras Reserve Balance
B. Excerpted notes from the Finance Committee’s meeting of April 19, 2011
C. Summary of approved and potential projects that could be funded from the ESP Reserve

PREPARED BY: MONICA PADILLA
Senior Resource Planner

REVIEWED BY: JANE RATCHYE
Assistant Director, Utilities Resource Management

DEPARTMENT HEAD: VALERIO O. FONG
Director of Utilities
Schedule for Transfer and Ending Balance for the Calaveras Reserve
FY 2013 through FY 2024

<table>
<thead>
<tr>
<th>Fiscal Year</th>
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Excerpted notes from the Finance Committee’s meeting of April 19, 2011


Ipek Connolly, Senior Resource Planner, spoke on the Revenue Cost Projections and Reserves. She also introduced the Calaveras Reserve and the reasons behind the proposed transfer. She discussed the Risk Assessment and the Rate Comparisons. Staff made no request for revenue or rate increases for the Electric Utility for 2012. Staff requested a transfer of $5.238 million from the Calaveras Reserve into the Electric Utility Operating Budget for 2012 as a minimal transfer following the Calaveras Reserve Guidelines. Projected costs and revenue streams were provided for information and were subject to change. Electric Rate Stabilization Reserve balances were projected within the minimum and maximum guidelines for the next five years with the projected 5 percent per year rate adjustments for 2014-16. Electric Utility average customer bills were currently 39 percent lower than PG&E and one of the lowest in California. The Electric Fund Revenue and Cost Projections were also discussed. She discussed forward market views versus actual market costs for electric prices. Supply costs were lower than expected. The electric price market cost was similar to the gas chart. She reviewed lower than expected renewable costs and transmission costs. The only known variation was supply costs. The budget year and beyond overall minimum cost increases were about 3.5 percent per year over the next five years. There was a built in 5 percent rate adjustment for the next five years.

Future changes were discussed. Most were business as usual with regard to the future forecast, with the exception of a built-in $2-3 million CIP expenditure in 2013 for SmartGrid technology. There were expected reimbursements and grants at 65% built back in. She also noted an additional energy efficiency-planning amount of $1.7 million. A built-in 5 percent rate adjustment was discussed. She reviewed and summarized the Calaveras Reserve. She noted Staff will start a thorough review of the need and purpose of the Calaveras Reserve with the Utilities Advisory Commission (UAC) in June 2011. She discussed the stranded costs calculations.

Council Member Schmid asked for clarification on the stranded costs.

Ms. Connolly stated the cost was greater than the market value. There was a cost to having the asset. The value was established by the market price. The amount, which was above the revenue generated by the market price, was the stranded cost.

Council Member Schmid asked if they were getting hydro from Calaveras, and if the market price was low, then how could the cost be greater.

Debra Lloyd, Senior Resource Planner, stated the value of the electricity was low but the costs are fixed. She noted there were debt service costs and O&M costs. Council Member Schmid asked how can there be a surplus in a good hydro year. Ms. Connolly stated if the market price was very high, then the production from this asset was very high, and this covered and exceeded the fixed cost.
Tomm Marshall, Assistant Director Engineering, stated the general cost to develop the energy was higher than the energy output.

Council Member Schmid asked if this were true even in a good hydro year.

Monica Padilla, Senior Resource Planner, stated this was a good hydro year and that it cost $10 million to run the Calaveras Project. The energy and ancillary service were valued at $6.2 million, so that was a loss.

Ms. Lloyd stated when there is a good hydro year, the availability of that water can actually drive the market price lower.

Council Member Scharff asked about the market price of the energy. Would the price still be the same if this was considered green energy.

Ms. Padilla could not quantify that value. Based on market price for long-term renewables at $4-5 per megawatt hours, if they sold Calaveras to someone else, that was the price they thought they might get.

Ms. Connolly continued with discussion of the Stranded Cost Calculations with an estimated $55 million in the reserves. The budget year minimum short-term stranded costs were estimated at $5.24 million, the long-term stranded costs were estimated at a total of $30.8 million, which left $35 million to benefit Electric Ratepayers. Staff was not proposing any funding for special projects. This was for implementation of existing policies. She discussed the Electric Fund Supply Rate Stabilization Reserve (SRSR) Levels with transfers from the Calaveras Reserve, which were within the minimum and maximums. These were expected to stay this way within the budget year with the 5 percent rate increase built in, and in keeping with these projections. She continued her discussion with the Electric Fund Distribution Rate Stabilization Reserve (DRSR) Levels. Again, they were at a healthy point and expected to remain there. The 2011 Expected Average System Revenue per KWh ($/KWh) as of January 14, 2011 were discussed and the relative standings within Palo Alto which included all customers by all power supplies. It was a self-reported survey and all customers reported significant savings. She summarized staff recommendations, which included making only the minimum transfer of $5.2 million from the Calaveras Reserve into the Utility Operating Budget. Implementation of Council’s 2009 approved guidelines to return Calaveras funds to the ratepayers was discussed as well as the guidelines in place, which allow staff to efficiently manage financial forecasting and rate setting activities. She discussed the UAC’s recommendations at the April 6th 2011 meeting in which they delayed the decision on the Calaveras Reserve transfer for six months to allow the UAC to understand and review the police and purpose of the Reserve. A chart of the Electric Fund Supply Rate Stabilization Reserve (SRSR) Levels with transfers from Calaveras Reserve was reviewed showing the impact of not implementing the current policy.

Ms. Lloyd noted they were unable to show a number of different scenarios so showed what would happen without the transfers.
Asher Waldfogel, Utilities Advisory Commission (UAC) Chair, provided background on some of the long-term discussions that had been going on with at the UAC. It was not that they were against using the funds in transfer to help lower rates, but they were also interested in researching other areas where these funds may be of use, such as some of the other pending and planned projects, SmartGrid, for example. They wanted to make an educated decision and do what was best for the reserves and for the ratepayers.

Council Member Yeh asked for clarification and a better understanding of the transfer and the stranded costs through 2032. He asked what the timeframe was for the potential projects regarding Calaveras when it came to the transfer of funds from the Reserve.

Mr. Marshall stated they were having ongoing discussions on specific projects.

Ms. Lloyd noted a specific project was funded based on its value to the community and not just because there was a pool of money to be spent on a project.

Council Member Yeh asked, given UAC’s recommendation for the six-month hold on the transfer of the Calaveras Reserve, he asked why Staff had recommended that the transfer move forward. He asked what potential loss there was in having the six month delay in funding.

Ms. Connolly stated the money was not going anywhere, so having it now rather than later allowed them to move forward with the budget process to more efficiently manage things.

Council Member Shepherd asked if the 5 percent increase on the Electric Fund Supply Rate Stabilization Reserve (SRSR) Levels included the transfers.

Ms. Lloyd stated this was the case.

Council Member Schmid spoke to the Electric Fund Revenue and Cost Projections and the Adopted Budget over-estimating the cost of purchases. He discussed good hydro years, versus bad hydro years, and questioned whether a good hydro year was starting currently.

Ms. Padilla stated two things happened in 2011; really good market prices and hydro started materializing in March. The projections were done in November and December. Council Member Schmid noted a good hydro year should be nine months, so that presumably would carry into 2012. He noted he continued to struggle with the projected numbers.

Ms. Connolly explained some of these numbers further. The projected 2012 estimates were based on numbers from December prior to knowing the hydro situations. Projected 2011 was based on February. The budgeting process required them to submit their numbers in December. They have the benefit in February of knowing a better estimate. They update their projections every week. She can tell the latest estimates for 2012 are very close.

Council Member Schmid stated it was hydro with gas backup, so hydro in total along with Calaveras was high. He cited other reasons why it was difficult to agree with these number estimations. He also spoke to the extremely conservative reserve and purchase guidelines. He
stated they were asking the ratepayer to buy them insurance in their risk forecast with an everlasting notion that there is a need for more reserves. He stated the conclusion was to go to the UAC to use the Reserves more efficiently or to ask for the 5 percent increase.

Ms. Connolly clarified they were not requesting to take the money out of Calaveras and put it into rate stabilization. The money would effectively work in the way he suggested, which was to put it in the operating budget, to relieve the budget in revenue collection. Council Member Schmid stated he felt they had over-estimated the cost of purchases for the hydro year.

Ms. Connolly stated this was the risk assessment they were currently undertaking.

Council Member Schmid noted they had undergone this discussion before, and the agreement was to return with these guidelines.

Ms. Lloyd asked if he was referring to the Rate Stabilization Guidelines.

Ms. Connolly stated they had reviewed these guidelines with the Council in 2009.

Council Member Schmid stated his perception was the way they had treated the risk and the reserve guidelines, and the purchase costs in this hydro year, were overestimated.

He stated there were three alternatives: 1) let the money sit for six months, 2) if it comes to the Electric Fund that they consider the 5 percent rate increase, or 3) consider it as a constant fund of $2 million forever to the Electric Fund so there were no rate bumps.

Council Member Scharff stated it was helpful to have the fund for special projects. He also wanted to see the utilities underground. He recognized the fund could be used to match other funds. He felt waiting six months had no impact, since they could always decide to do it later. He also had questions on what kind of investment rate of return and debt service were on these funds.

Lalo Perez, Director Administrative Services, said it was laddered. There was a 3.4 percent average rate of return. Ms. Padilla stated, as far as debt service on the Calaveras project, they had 23 percent ownership with other members on the project. The value on the debt was $160 million.

Mr. Perez added going into the market it would be a 10 year, three percent rate of return locking up funds for a long time. Shorter term was one percent in a year or two.

Mr. Marshall stated money they could be spent on increasing efficiency to the system.

Mr. Waldfogel asked if they remembered what the dollar value for undergrounding the overhead utilities was.

Mr. Marshall said Staff would have to return to the Committee with that information.
Council Member Yeh stated they were also potentially competing with telecommunication companies.

Mr. Marshall stated there was a reserve in the Fiber Fund. The money could be used for a transmission line. There were other things the money could be used for such as generation.

MOTION: Council Member Shepherd moved, seconded by Chair Scharff, that the Finance Committee recommends to the City Council approve the total transfer of $5,238 million from the Calaveras Reserve into the Electric Utility Operating Budget for Fiscal Year 2012.

Council Member Shepherd looked toward a return to ratepayers. She recognized that this issue will come back in ensuing years. She also had an ethical issue with coming up with a way to spend the money without going back to the ratepayers for input on their willingness to pay for the projects.

SUBSTITUTE MOTION: Council Member Schmid moved seconded by Council Member Yeh to suspend the transfer of the $5 million of the Calaveras reserve to allow staff to return with a proposal about how to spend it in six months after discussion with the UAC.

Council Member Yeh stated he hoped for clear criteria on how to identify a project that will truly benefit the ratepayers, a rank and order of projects for UAC consideration. Council Member Scharff stated he did not want to see this being an issue of spending money simply because it was available. He would rather there be a no project alternative than the money being transferred for the sake of being transferred because they have the money to spend. Worded correctly, the funds should be used wisely.

Council Member Yeh stated the interconnection for him was dialogue they had previously regarding emergency preparedness and other issues where this money would help them accommodate their priorities. He said the additional six months gives them time to put some criteria on how they spend the funds on what truly is best for the City and its ratepayers.

Council Member Scharff stated they could Motion to do the transfer and have the UAC look at the remaining $50 million and whether future transfers can be made, ranking and prioritizing projects or choosing a No Project Alternative.

Council Member Shepherd stated this was implied in the original Motion.

Council Member Yeh stated he did not hear that in the original Motion.

Council Member Shepherd stated they were going to bring this back to the UAC.

Council Member Schmid stated the distinction between the Motion and the Substitute Motion was the $5 million dollars remaining in the fund until the $50 million takes place.
Council Member Shepherd stated if they wait long enough they will have better information. However, they also have to move forward, so she did not support the Substitute Motion.

Council Member Schmid worried that the transfers to the Electric Fund would stabilize the already substantial reserves.

Council Member Shepherd asked if she understood correctly that this stabilized the reserves right now.

Ms. Connolly stated with current projections, the costs were above revenues, which meant they were under-collecting and could use what was in reserves without showing a rate increase. If they take the $5 million out, they would have a rate increase in 2013.

Council Member Schmid said the purchase cost increased by 16% in a great hydro year.

Ms. Connolly stated those costs were $1.8 million this year, and the forecast was holding.

Council Member Schmid stated the only cost that was changing was the purchase costs.

Ms. Lloyd stated this included the renewables and transmission costs.

SUBSTITUTE MOTION TO THE SUBSTITUTE: Council Member Scharff moved, seconded by Council Member Yeh to transfer $5 million of the Calaveras Reserve and request the Utilities Advisory Commission review the remaining $50 million and suggest a future prioritized project list, future transfer policies, and a “no project” alternative by September 2011 to the Finance Committee.

Mr. Waldfogel asked why the review had to be completed by September and why not just by the end of the year.

Council Member Scharff because this has been out there for quite some time, at least since 2008.

Council Member Yeh noted the transfer policy had been revisited many times, and predated many Members of Council.

Mr. Waldfogel asked for more time to consider projects thoughtfully.

Council Member Yeh offered they could have until prior to next budget cycle in November.

Council Member Schmid stated he was voting against this because they had an obligation to the ratepayers. He stated spending $5 million upfront, without the knowledge and input of ratepayers, was not best practice.

Council Member Shepherd stated the way she understood the process, these monies were extracted from the ratepayers via their electrical billing processes. This was then some type of matriculation to get it back after 22 years.
Ms. Lloyd stated the more the process was delayed, the more people float in and out of town and the process.

Council Member Shepherd noted this was one of the reasons she was in support of the transfer until there was a more deliberative reason not to do it. She was in support of the Substitute Motion.

SUBSTITUTE MOTION: Passed 3-1, Schmid no
Mr. Perez noted this was not on Consent, that it would be an Action item for Council.

Council Member Scharff asked if that was true. He thought it became a part of the overall Budget and then came back to the Finance Committee.

Council Member Shepherd stated she objected to that, and wanted it to go to Council.

Council Member Schmid stated the recommendation said it was recommended to Council to approve it on Consent.

Mr. Perez stated they could make it part of the budget process. It could be an Item listed as an approval piece.

Council Member Shepherd asked for understanding of the protocol.

Mr. Perez stated if it was part of the budget it would be listed as an item to be approved as part of the whole.

Council Member Shepherd stated she understood it but objected to it.

Council Member Scharff stated there were a bunch of items that get spelled out.

Council Member Shepherd stated this was not cuts, this was policy discussion.

Mr. Perez stated it happens with Utility Rate Increases.

Council Member Shepherd stated it will have to get pulled out during a long night of budget discussion.

Council Member Scharff stated it does not go under Consent because it was voted 3-1.

Mr. Perez noted the problem was that a Council Members may not have the whole budget in context.

SUBSTITUTE MOTION: Council Member Shepherd moved, seconded by XXXX for the item, “Recommendation of Approval of Transfer of $5.238 Million from the Calaveras Reserve into the Electric Utility Operating Budget for Fiscal Year 2012 and Electric Utility Long Term
Financial Projections and Revenue Requirements.” to be placed on the City Council Agenda as an Action Item.

SUBSTITUTE MOTION FAILED FOR LACK OF A SECOND
Mr. Perez stated it would be presented in Council’s package on June 13th 2011. Council Member Shepherd asked if it was reversed if it would impact the rest of the Budget.

Council Member Scharff stated it would only affect the Electrical portion of the Budget.

Council Member Shepherd noted she still was unclear on this part of the process once it moved to Council.

Mr. Perez stated she could ask the City Attorney about this, and that it was not uncommon to have different positions on this in the Budget Adoption.

Council Member Shepherd stated she was trying to get this item separated out as an Action Item so that it would not get rehashed or slashed in the Budget discussions.
Summary of Potential Projects
for Funding from the Calaveras/Electric Special Project (ESP) Reserve

Many projects have been identified for possible funding from the Calaveras Reserve after Council revised the Calaveras Reserve Guidelines in 2009. These ideas include:

1. Investment to implement advanced metering infrastructure (AMI)
2. Investment and incentives for local generation and cogeneration projects within the City
3. Investment to upgrade the City’s transmission line connection
4. Energy Efficiency
5. Emerging Technology Demonstration Program
6. New Utilities Department Building
7. Other ideas

1. **Investment to implement advanced metering infrastructure (AMI)**
   The City’s Automated Meter Reading (AMR) Pilot Project was completed in September 2007. The pilot included enabling approximately 4,400 electric, gas, and water meters, which are covered by six meter reading routes, to be read remotely. Currently the usage recorded by these meters is being read remotely by either the fixed radio network or by a drive-by reader. The pilot project has demonstrated that an AMR system is able to meet many of staff’s expectations with regards to reading electric, gas, and water meters for billing purposes.

   AMI is one of the building blocks for a “smart grid”. It provides the interface between the customer and the utility and could lead to improved demand-side load management, outage response, customer satisfaction, efficiency of operations, and reduced system losses.

   For FY 2010, Council approved $70,000 to fund the Electric utilities’ one-third share of the development of the smart grid road map. The consultant assessment of smart grid applications in the City was presented to the UAC in April 2011. The assessment found that there was no compelling reason to make major investments to implement smart grid in the city in the near future. The consultant recommended, and UAC and staff concurred, to undertake a number of intermediate steps in the next 2-3 years to better position the City to implement a smart grid road map. Undertaking the intermediate projects in the next 2-3 years is preliminarily estimated to cost up to $500,000. The assessment also found the total cost of implementing smart grid applications will require an investment of $16 million for the electric, natural gas, and water utility.

2. **Investment and incentives for local generation and cogeneration projects within the City**
   Locally sited, natural gas-fired cogeneration applications have the benefits of higher efficiency, higher reliability and sustainability, and elimination of line losses associated with transmitting electricity over long distances. Cogeneration applications (also known as combined heat and power) simultaneously generate electricity and useful heat for utilization in buildings or processes. In March 2011, Council approved the Long-term Electric Acquisition Plan (LEAP) along with several initiatives to promote local generation to meet the City’s Renewable Portfolio Standard (RPS) through the possible deployment of Feed-in-Tariffs (FIT) and certain reliability needs.
**PLUG-In Program**
In 2007 the City launched a distributed generation incentive program for customers, the Power from Local Ultra-clean Incentive Program (PLUG-In) (CMR:391:07) to provide incentives for customers to invest in cogeneration. For FY’s 2010 and 2011, Council approved funding from the Calaveras Reserve of $200,000 for each year for Plug-In program rebates. No rebates have been issued to date.

**LEAP Strategy #4 Local Generation**, promote and facilitate the deployment of cost effective local resources, calls for an evaluation and possible modification of the City’s PLUG-In program. This assessment is expected to be completed by December 2011 and may call for increased funding from the Calaveras Reserve.

**Anaerobic Digester**
Council approved spending $75,000 from the Calaveras Reserve in FY 2011 to pay for a share of the Energy/Compost Feasibility Study of dry anaerobic digestion near the wastewater treatment plant. The electric utility’s share of the approved consultant contract is $49,439, and the study is not anticipated to go over budget. Staff presented near-final results of the study to the City Council on June 27, 2011. The study showed waste management alternatives involving anaerobic digestion to be comparable in cost to alternatives involving export of waste out of the City, with no alternative standing out significantly compared to others. The City Council directed staff to finalize the study, but did not give any further direction on how to proceed. The decision to proceed with further study of dry anaerobic digestion is unlikely to be made until after the November 2011 election. There is a citizen initiative to dedicate a portion of Byxbee Park to use as the site of a waste to energy project, and whether further study is undertaken will depend in part on whether that initiative is passed. If the initiative passes there may be further requests for Calaveras funding for this project.

**Local Gas-Fired Generation**
LEAP Strategy #4 Local Generation calls for staff to evaluate the feasibility of developing a 25 to 50 MW generating facility to connect to the City’s distribution system in order to meet certain energy and reliability needs. Staff is in the process of assessing such feasibility including the economics and availability of potential sites.

Staff intends to update the UAC in fall of 2011 with an assessment. Early indications support previous findings that aside from the low value relative to cost of building gas-fired generation, no potential site exists within Palo Alto to build a generator of such scale. Staff therefore does not anticipate requesting use of ESP Reserves to help cover the cost of building gas-fired generation within Palo Alto.

3. **Investment to upgrade the City’s transmission line connection**
The City is connected to the electrical transmission grid at the Colorado substation at 115 kilo-Volts (kV). Upgrading the connection voltage to 230 kV and receiving all the electricity needed to serve the City at this higher voltage has the potential of saving up to $5 million per year and improving the City’s transmission service reliability. The City has conducted several studies independently and in conjunction with the Pacific Gas and Electric Company (PG&E) to upgrade
the voltage at the Colorado substation, but the cost of the upgrade was estimated to be over $160 million, making the project economically infeasible.

The City is currently exploring a connection to the 230 kV transmission grid through the SLAC substation in the west side of the city. The cost of this project is preliminarily estimated to be over $40 million with the potential of serving approximately half of the City’s electrical load. The feasibility of this project is highly dependent on interest by Stanford and SLAC.

### 4. Energy Efficiency
Council approved using $2,000,000 from the Calaveras Reserve to fund electric efficiency loans to business customers. These zero-interest loans would help customers invest in energy efficiency by providing financing for up to 5 years for a loan of between $5,000 and $50,000 per customer for those customers who install electric efficiency equipment through one of the utility’s rebate programs.

The program and all related documentation and applications were developed by a team including staff members and representatives of a third party administrator, QuEST. The program has been available to and promoted with commercial customers through the Commercial Advantage Program, Right Lights+ and the Commercial and Industrial Energy Assistance Program since May 2011 (www.cityofpaloalto.org/commercialfinancing). As of July 1, 2011, staff is in discussion with four customers on completing loans. These loans are expected to be completed by the end of the third quarter in 2011.

### 5. Emerging Technology Demonstration Program
Led by the City Manager’s Office, an internal, multi-departmental team has been formed to explore emerging technologies and opportunities for the City to help facilitate innovation within Palo Alto. The Utilities Department is assisting with identifying potential technologies and/or services to be piloted by Utilities customers.

In the fall of this year, staff plans to request funding for the establishment of this program. Currently, the amount that is considered appropriate for such a program is about $300,000 per year with about $200,000 for electric projects. Further, the program could identify additional projects for funding from the proposed ESP Reserve to help defray costs and/or provide incentives for technologies related to the use of electricity.

### 6. New Utilities Department Building
The City’s Infrastructure Blue Ribbon Commission (IBRC) formed in 2010 is a City Council appointed citizen commission charged with advising the City Council on how Palo Alto’s infrastructure backlog might be reduced.

The primary focus of the IBRC is General Fund infrastructure including the City’s Municipal Service Center (MSC), of which the Utilities Department occupies a portion. Possible recommendations may include the upgrades and/or expansion of the MSC to accommodate growing use or even the consolidation of Utilities Department functions in one building outside of the MSC. ESP Reserves could be used to fund the Electric Fund’s share of such a building. The IBRC is slated to bring its findings and recommendations to Council in December 2011.
Table 1 below lists the Calaveras Reserve funds that have already been approved for specific projects. Table 2 lists potential funds that may be requested in the future.

7. Other Ideas
Since 2009, staff and the UAC have identified many ideas for potential funding from the Calaveras Reserve. Besides the ones described above, ideas have included funding of rebates for photovoltaic projects within the City, replacing street lights with more efficient technologies, purchasing land from the City and loaning funds to other City funds to save on financing costs. The ideas remain for future consideration, but are not recommended at this time.

Table 1 below lists the Calaveras Reserve funds that have already been approved for specific projects.

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Table 2 lists potential funds for the smaller projects that may be requested in the future. Larger projects such as a new transmission line, a new Utilities building, and installation of smart meters is not included in Table 2 as the costs are uncertain at this time.

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<th>Fiscal Year</th>
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<th>Emerging Technology Demonstration Program</th>
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ITEM 3: ACTION: Recommend Proposed Modifications to the Calaveras Reserve Guidelines and Establishment of the Electric Special Projects Reserve

Senior Resource Planner Monica Padilla provided a brief presentation of staff’s recommendation to split the existing Calaveras Reserve into two reserves to provide clarity and certainty regarding the use of funds going forward. Padilla explained that the Calaveras Reserve (CR) estimated ending balance for FY 2012 is approximately $50 million. Staff’s proposal would leave approximately $25 million in the Calaveras Reserve to be used to offset above market cost associated with the Calaveras Hydroelectric Project based on a Council-approved schedule of transfers through FY 2024. Staff would no longer calculate stranded cost on an annual basis and the transfer would be included as part of the annual operating budget. Padilla further explained that the remaining approximately $25 million would be used to establish a new reserve, the Electric Special Project (ESP) Reserve to fund electric projects to the benefit of electric ratepayers. The process of selecting projects to be funded through the ESP would be the same as in the existing Calaveras Guidelines and that all projects would be subject to UAC review and Council approval.

Commissioner Melton expressed his general support of staff’s objective to solve the issue of what to do with the Calaveras Reserve and staff’s attempt at simplifying multiple objectives, however does not support staff’s recommendation. Commissioner Melton suggested that instead of annually transferring funds from the Calaveras Reserve to the Electric Rate Stabilization Reserve (i.e., operating budget) that the funds be transferred to the newly created ESP Reserve and suggested a sunset date for the ESP Reserve of 2024 to make it consistent with staff’s proposed sunset date of the Calaveras Reserve.

Public comment:
Jeff Hoel expressed his support for Commissioner Melton’s suggestion of not transferring Calaveras Reserve to offset operating costs, but rather holding all of the funds for special projects. Mr. Hoel further added that he did not believe a sunset date was needed for the ESP Reserve.

Commissioner Eglash also expressed his support of Commissioner Melton’s suggestion that the CR funds be used to fund special projects and not to stabilize rates adding that the City presents itself with a great opportunity having collected $50 million. He indicated that now was the time to move forward in deciding how to use it. He suggested that the UAC develop guidelines so that a process could be used to evaluate projects and decide which to pursue. Commissioner Eglash made a motion to adopt the following guidelines to be used when evaluating how to expend funds, including:

• Funds should be used for projects that benefit electric customers.
• Funds should be used for projects rather than offset operating costs.
• Projects should be worthwhile, not spent frivolously.
• Cost of project should be relevant and impactful relative to amount in reserve. Not to pay for small projects that can easily be paid for another way.
• Funds should be spent with speed and certainty—sooner rather than later.
Commissioner Eglash mentioned specific projects which could receive funding such as redundant electric supply, energy efficiency, AMI/smart grid and removing barriers to deployment of renewable energy projects. He also expressed that funds should not be used for undergrounding of electric utility services. Commissioner Eglash provided written copies of his proposed guidelines to other UAC members and staff.

Chair Foster also supported the idea of transferring all funds to the ESP Reserve to be used for special projects. Commissioner Foster asked staff if it made sense to transfer funds annually as suggested by Commissioner Melton versus all at one time. Utilities Assistant Director, Jane Ratchye indicated that there was no point in transferring annually if the desire was to spend it all on projects.

Commissioner Waldfogel asked staff if the Calaveras Reserve was needed to cover other potential exposures other than Direct Access, which is not presumed to be an exposure. Ratchye confirmed that there are no truly "stranded costs" at this time as the City does not allow Direct Access. She stated that there is legislation which orders the phase-in of Direct Access for investor owned utilities and Direct Access could become a requirement for publicly owned utilities, but that at this time, the City does not offer, and is not required to offer, Direct Access to its customers.

Commissioner Berry asked what rate impact would result from not transferring the $25 million proposed by staff to be transferred to the electric operating budget. Staff indicated that the impact of not transferring the $25 million is a one time rate increase of about 2.5% would cover the impact associated with transferring the full CR to the ESP Reserve. Commissioner Berry also expressed that he also does not agree with transferring funds annually to stabilize rates and would prefer to spend the funds on a significant projects with tangible, long lasting benefits to customers.

Chair Foster also expressed his support of using all of the Calaveras Reserve funds for special projects, however is concerned about acting prematurely to spend the money and/or pushing staff to act too quickly and would prefer to have a date to spend the funds by 2020 or 2024.

Commissioner Berry asked staff to comment on whether it sees any problems with the motion since it is different from what staff recommended. Director Fong stated that she is uncomfortable not using the money for the reason it was collected originally. In a sense, Fong stated that there was a “compact” with the customers about the use of those funds.

**ACTION:** Commissioner Eglash moved to recommend Council adopt the following guidelines to expend the funds in the Calaveras Reserve:

1. Funds should be used for projects that benefit electric ratepayers.
2. Funds should be used for projects, not to offset operating costs and reduce rates.
3. Projects should be worthwhile; that is, funds should be used for projects that would have been worth doing even if the City had to pay for them.
4. The cost of a project should be relevant and impactful. Funds should not be spent on projects that are too small and can easily be funded some other way.
5. If projects can be found that meet the above guidelines, then speed and certainty are preferred. It is better to spend the funds sooner rather than later. Staff should examine means by which the entire funds can be spent now, and the consequences of doing so.

Chair Foster seconded the motion and offered a friendly amendment to the motion to move all the money in the Calaveras Reserve to the ESP Reserve and sunset the reserve by 2020 (all money not spent by 2020
would be transferred to the electric operating fund). Commissioner Eglash accepted the amendment, but wanted the end date to be earlier than 2020. He suggested that projects be determined by 2015.

The amended motion passed unanimously (6-0).