TO:        HONORABLE CITY COUNCIL
ATTN:      FINANCE COMMITTEE
FROM:      CITY MANAGER        DEPARTMENT: UTILITIES
DATE:      JULY 15, 2008        CMR: 307:08
SUBJECT:   RECOMMENDATION TO CITY COUNCIL TO ADOPT A RESOLUTION
ANOTHER AGREEMENTS FOR THE SHORT TERM ASSIGNMENT OF THE CITY’S SHARE OF ENTITLEMENTS ON THE CALIFORNIA-OREGON TRANSMISSION PROJECT TO OTHER MEMBERS OF THE TRANSMISSION AGENCY OF NORTHERN CALIFORNIA

RECOMMENDATION

Staff recommends that the Finance Committee recommend that Council adopt the attached resolution authorizing the City Manager or his designee to execute Agreements for the short-term assignment of the City’s share on the electric high voltage California-Oregon Transmission Project (COTP) to the Turlock Irrigation District (TID) and the Sacramento Municipal Utility District (SMUD), thereby lowering the cost to serve the electric utility customers of the City.

BACKGROUND

The Transmission Agency of Northern California (TANC) is a California Joint Powers Agency, whose membership comprises: SMUD; TID; Modesto Irrigation District (MID); and the California cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. TANC currently owns approximately 87 percent of the COTP, a 1600 MW, 340 mile long electric transmission line from the California-Oregon Border (COB) to the 500 kilovolt Tracy Substation in Northern California. The City is a signatory to TANC’s 1990 Project Agreement No.3 (PA3) (Resolution No. 6877, adopted March 26, 1990). PA3 provides the City a share of approximately 50 MW of TANC’s entitlement on the COTP.
Since the COTP became operational in March 1993, the City has utilized this asset to access low-cost electricity resources from the Pacific Northwest to serve the electricity needs of the City. However, from time to time, the City has executed temporary assignment agreements with other TANC members when the City’s electric supply portfolio did not have the need to access resources from Oregon or when it was uneconomical to do so. The last assignment agreement (with the City of Roseville) ended in December 2004.

While the City and the Northern California Power Agency (NCPA), as the City’s electricity scheduling agent, have continued to utilize the COTP to meet the electrical loads of the City at the lowest cost, the value of this transmission right in recent years has been lower than the cost of ownership. This is particularly pronounced for Palo Alto; the City is located within the control area operated by the California Independent System Operator (CAISO), while the COTP line is in a separate control area jointly operated by SMUD and the Western Area Power Administration (Western). While the City continues to consider the COTP a strategic asset for future years when the cost of ownership can be offset by its market value, the projected short-term value of the asset has prompted staff to explore temporary assignment options to members of TANC located within the SMUD-Western transmission control area. These entities have the potential to garner greater value from the transmission asset.

**DISCUSSION**

The City’s electricity supply related budget for FY 2008-09 is approximately $78 million, of which approximately $1.85 million is related to the COTP Transmission asset ownership cost. However, the value the City derives from this asset is well below the cost of ownership and is described in detail below.

**Cost Drivers**

The City’s share of TANC’s budget for FY 2007-08 was $1.852 million and consisted of the following components, with debt service accounting for 70% of the cost.

<table>
<thead>
<tr>
<th>Cost Driver</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Service</td>
<td>$1.284 M</td>
</tr>
<tr>
<td>COTP O&amp;M</td>
<td>$0.360 M</td>
</tr>
<tr>
<td>TANC operations</td>
<td>$0.173 M</td>
</tr>
<tr>
<td>Special projects</td>
<td>$0.027 M</td>
</tr>
<tr>
<td>Open Access Same-Time Information System (OASIS)</td>
<td>$0.006 M</td>
</tr>
<tr>
<td>Total</td>
<td>$1.852 M (~$0.16M per month)</td>
</tr>
</tbody>
</table>

The debt service costs are expected to remain flat at $1.284 million/year until 2024 when the debt is fully paid-off. The other costs of $550,000 per year are expected to increase by 3% per year. In addition to these costs of ownership, COTP owners incur a number of usage-based
charges such as SMUD transaction fees, transmission line losses from the COB, and other CAISO charges. These additional costs, which are highly variable and dependent on utilization of the line, are estimated at between $100,000 and $400,000 per year. These costs could also change due to regulatory changes.

**Value Drivers**

The value of the COTP is derived in multiple ways, but falls into three major categories:

1. *Basis Value:* Basis is the difference between the market prices for electricity delivered to COB versus delivered into Northern California.

   Since taking ownership of COTP, the City has entered into a number of long-term transactions to capture this basis value. However, in the past 5 years, the basis value captured has varied between $500,000 and $1.3 million per year, considerably below the $2 million annual cost of owning and operating the asset.

   Based on forward market prices, the basis value of COB versus Northern California deliveries for the next 12 months is estimated at 40% to 70% of the cost of the COTP and declines even further in the outer years. Most of this annual value is derived during the spring months when low cost hydroelectric power from the Pacific Northwest is available to be imported into California. For the months of the short-term assignment – August 2008 through January 2009 – the basis value is on the low end, resulting in higher net costs to the portfolio. For this reason, regardless of any other transactions contemplated for this asset, this short-term lay-off proposal is in the best interests of City’s electric utility customers.

2. *Capacity Value:* Supplies imported from COB have capacity and ancillary service value.

   Imports of firm energy delivered at COB and scheduled over the COTP for the City’s load currently count towards meeting the City’s 15% planning reserve requirements (also referred to as system capacity requirements). Under current projections of the City’s load and purchases of capacity to meet local reliability requirements, the City’s electric portfolio has sufficient system capacity even when excluding contracts at COB. While there may exist the potential to sell the COTP capacity counting rights in the future, there is no market for this product at present. Also, the ability to apply imported energy towards system capacity requirements may change in future regulations.

   Staff estimates that the potential capacity and ancillary services value associated with COTP could be $350,000 to $600,000 per year, or 15% to 30% of the cost starting in 2010.
3. **Operation Value**: The COTP has value associated with access to resources and markets in the Pacific Northwest for non-economic reasons.

Operational value is derived by accessing the Pacific Northwest markets to meet fluctuations in electric demand in real-time (referred to as real-time load following) and for green (renewable) energy. With respect to the need to access the Pacific Northwest markets for green energy, the COTP transmission remains an option. However, staff’s assessment is that there are currently sufficient renewable resources within California that could be economically obtained for the City’s medium- and long-term renewable portfolio goals. In addition, if the opportunity arises to access Pacific Northwest resources to meet short-term renewable energy needs, then there are alternative methods for transporting energy from the Pacific Northwest to the City that may be obtained at lower cost than COTP ownership. Such alternatives include CAISO service and other private and public sector suppliers. As mentioned above, for the months of the short-term assignment – August 2008 through January 2009 – the price difference between the Pacific Northwest and Northern California is low. Hence, staff suggests that the possibility of accessing Pacific Northwest renewable energy is not sufficient reason to reserve COTP capacity over the short- and medium-term (next 15 years).

Staff’s assessment of operational value of the asset is $50,000 to a $100,000 per year, or less than 5% of the ownership cost.

In total, the value of COTP to the City is estimated to be about 60% to 75% of the annual cost of owning and operating the asset based on the factors identified above. Over the period proposed for the short-term assignment, the value of the COTP is estimated to be even lower at 10% to 20% of the cost, because the basis value is typically lower in the later part of the year, with most of the basis value captured during the spring and early summer.

**Agreement Terms**

The Utilities Advisory Commission in April conceptually approved staff’s recommendation to assign the City’s share of the COTP to interested parties. Since then, staff has been pursuing a 15-year assignment agreement with SMUD, TID, and MID. The effective date of this long-term assignment was projected for August or September 2008, but negotiations have taken longer than expected. When the negotiations are completed in the coming months, staff will bring the final 15-year assignment agreement to Council for approval.

In the interim, until the 15-year assignment agreement is completed, SMUD and TID have requested a temporary assignment of the City’s rights in the COTP for the months of August
2008 through January 2009, or until the 15 year agreement becomes effective, whichever is earlier. MID is not interested in participating in the temporary assignment and is waiting for completion of the 15-year assignment: SMUD and TID will take MID’s share during the temporary assignment. Such a short-term assignment agreement is expected to have a value of $128,000 to $144,000 per month to the City and will be based on the following terms:

1. The Contract shall be negotiated with SMUD and TID, with each entity receiving one-half of the City’s share of COTP.

2. Contract to be based on industry standard Western System Power Pool (WSPP) Agreement.

3. Term of the Agreement shall not extend beyond January 31, 2009, and shall terminate on the effective date of the 15-year Assignment Agreement.

4. The price of the sale shall recover the full monthly cost the City incurs to own the asset (approximately $160,000/month).

Should the Council approve execution of the long-term assignment of the City’s interest in the COTP transmission line, the City will no longer have long-term access to the Pacific Northwest markets. However, the overall electric portfolio could continue to benefit from having access to other regional markets during those times when the cost of taking delivery of imported energy is lower than the value of the imported energy: For example, there may be times when the market price of energy delivered to COB plus the cost of transmission from COB into Northern California is less than the market price for energy available in Northern California. Staff is exploring a number of other contractual mechanisms to achieve the objective of accessing other regional markets when it is economically beneficial to do so. One such mechanism could be to enter into enabling agreements with members of TANC that will provide the option to the City and interested TANC members to execute short-term bilateral transmission transactions for the use of COTP during periods of value. Such access to COTP transmission in certain periods might be obtained at a discount to full costs. When staff finalizes an evaluation of such opportunities, staff will return to Council to seek additional approvals.

Risk Assessment

Assessment of Short-Term Assignment Risks: The risks of this short-term assignment agreement are minimal. Under the terms and conditions of the short-term agreement, Palo Alto will be compensated prior to the month, with the exception of the first month, when payment will be
received within 10 days of contract execution. As a result of this provision in the contract, any
default caused by SMUD or TID not paying the monthly bills will be remedied prior to the start
of the month’s delivery. In the absence of such remedy, the assignment agreement will be
terminated and the COTP asset then will revert to Palo Alto.

Summary

Based on a cost-benefit analysis, staff has recommended, and the UAC has approved in concept,
a long-term assignment of the asset at full cost. As the negotiations for the long-term assignment
have been slower than anticipated and are delaying the start of the long-term assignment to
November or December 2008, staff is now recommending to Council a short-term assignment to
recover the monthly cost of owning the asset during the interim. Staff will return to the Finance
Committee and the Council with a request to authorize the execution of a long-term assignment
of the COTP entitlements at a later date.

Due to the relative short time available to negotiate the agreement and seek Council approval,
staff recommends that the City Manager or designee be authorized to enter into the Agreements
for Short-Term Layoffs under the following terms:

1. The Contract(s) shall be with SMUD and TID, with each entity receiving one-half of the
   City’s COTP share.

2. Contract to be based on industry standard Western System Power Pool (WSPP)
   Agreement, and the final agreement shall be approved by the City Attorney’s Office.

3. Term of the Agreement shall not extend beyond January 31, 2009, and shall terminate
   upon the effective start date of the 15-year Assignment Agreement.

4. The price of the sale shall recover the full monthly cost the City incurs to own the asset
   (approximately $160,000/month).

BOARD/COMMISSION REVIEW AND RECOMMENDATIONS

The UAC reviewed the concept of a long-term assignment of the COTP at its April 2, 2008
meeting and voted unanimously to recommend conceptual approval of a long-term assignment of
the COTP, for up to 20 years. The subject of the short-term layoff, the need for which was a
result of delays experienced in the negotiations over the long-term layoff, was not included in the
review by the UAC because the delays were not anticipated at the time of the UAC review.
RESOURCE IMPACT

The net impact on the Electric Fund from the short-term assignment of the COTP is the difference between sales revenues from SMUD and TID (equal to the cost of owning the asset of approximately $160,000 per month), and lost opportunity for the City to derive value from the use of the COTP asset. As illustrated in the following table, assuming that the monthly value of COTP during the period contemplated for the short-term assignment is 10% to 20% of the monthly cost of ownership, the short-term assignment will result in a net savings of $128,000 to $144,000 per month.

<table>
<thead>
<tr>
<th>Monthly Cost</th>
<th>Short-Term Value ($thousand/month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Value</td>
<td></td>
</tr>
<tr>
<td>1. Basis Value</td>
<td>$8 - $24 (5%-15%)</td>
</tr>
<tr>
<td>2. Capacity Value</td>
<td>$0</td>
</tr>
<tr>
<td>3. Operational Value</td>
<td>~$8 (~5%)</td>
</tr>
<tr>
<td>Range of Monthly Value</td>
<td>$16 to $32</td>
</tr>
<tr>
<td>Monthly Value as a fraction of fixed cost</td>
<td>10% to 20%</td>
</tr>
<tr>
<td>Net Savings</td>
<td>$128 - $144</td>
</tr>
</tbody>
</table>

POLICY IMPLICATIONS

This recommendation is consistent with the Council-approved Utilities Strategic Plan with regard to managing supply portfolio risk to preserve a supply cost advantage. These bilateral transactions by TANC members are also sanctioned under the TANC Commission-approved Procedures for Allocations for COTP Transmission (One Year or Less).

ENVIRONMENTAL REVIEW

Approval of this agreement does not require review under the California Environmental Quality Act (CEQA) because it does not meet the definition of a “project” pursuant to California Public Resources Code Section 21065.
ATTACHMENTS

A: Resolution of the Council of the City of Palo Alto Authorizing the City Manager to Execute Agreements for the Short-Term Assignment of the City’s Share of Entitlements on the California-Oregon Transmission Project to other TANC Members

B: Draft Transaction Confirmation (WSPP) Agreements for Short-Term Assignment of COTP Entitlements to TID and SMUD. The complete Western System Power Pool (WSPP) Master Agreement is available at: www.wspp.org

C: Minutes from the April 2, 2008 UAC meeting

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