TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER     DEPARTMENT: UTILITIES

DATE: JANUARY 28, 2002

SUBJECT: ELECTRIC TRANSMISSION SERVICES OPTIONS FOR THE CITY AFTER THE EXPIRATION OF THE INTERCONNECTION AGREEMENT WITH PACIFIC GAS & ELECTRIC COMPANY ON MARCH 31, 2002

This is an informational report and no Council action is required.

BACKGROUND

Electric energy for serving Palo Alto customers is presently delivered via the transmission system owned by Pacific Gas and Electric Company (PG&E) and operated by the California Independent System Operator (ISO). Palo Alto’s energy under the Western Area Power Administration (Western) contract is delivered to the City under an interconnection agreement between Western and PG&E. Energy from Northern California Power Agency (NCPA) and other resources is delivered to the City using PG&E transmission lines under an Interconnection Agreement (IA) between PG&E and NCPA members, including Palo Alto. This agreement is set to expire on March 31, 2002.

Despite protracted discussions between PG&E and NCPA on the shape and form of a replacement IA, no agreement has been reached. To meet the 6-month advanced filing requirement, PG&E unilaterally filed a Revised IA (RIA) for Federal Energy Regulatory Commission (FERC) approval in August 2001. The RIA filed did not address the concerns of Palo Alto and other NCPA members, and effectively discontinues PG&E’s role in providing transmission and related services to the City of Palo Alto after the IA term expires. The filing directs the City to obtain such transmission related services from the ISO.
DISCUSSION

NCPA and the member Cities have several concerns regarding the RIA filed by PG&E on August 30, 2001. These concerns were outlined in a motion filed with the FERC on December 7, 2001. The shortcomings of the RIA are the following:

- The Stanislaus Commitments were agreed to by PG&E in 1976 as a condition for securing a license to build the Diablo Canyon Nuclear power plant. These commitments obligated PG&E to provide NCPA members with firm transmission service through the year 2050. The 1991 settlement agreement between NCPA and PG&E included further commitments by PG&E to provide transmission services to NCPA members. The RIA does not provide ‘firm transmission service’ consistent with the terms of PG&E’s Stanislaus Commitments and the 1991 settlement agreement. Firm transmission service is an important concept for Palo Alto to avoid potential future Bay Area congestion charges for transmitting energy from contracts/plants located outside the San Francisco peninsula to Palo Alto. The recognition of this right also provides Palo Alto the contractual right for a ‘virtual connection’ to generation plants operated by Western and NCPA, thereby potentially avoiding numerous ISO charges. Recognition of firm transmission rights also improves the feasibility for Palo Alto to participate in a control area independent of the ISO.

- Assignment of PG&E’s obligation to provide transmission service to the ISO does not appear to be a desirable substitute. The cash flow problems faced by the ISO, its lack of independence, the dysfunctional market structure operated by the ISO, the high cost of services offered, and the lack of firm transmission service are major shortcomings related to ISO transmission service. Solutions to overcome these issues seem do not appear to be readily available at this time.

- Even if NCPA members decide to join the ISO, PG&E and other Investor Owned Utilities (IOUs) oppose NCPA member rights to fully recover costs associated with transmission assets handed over to the ISO. If Palo Alto decides to join the ISO, the City would have to sign a Transmission Control Agreement (TCA) and turn over the City’s operational control of about 50 MW of the California Oregon Transmission Project (COTP) to the ISO. The City would then obtain full transmission services from the ISO. The ISO recovers the investment transmission and O&M costs of all participating transmission owners from all users of the ISO grid through the Transmission Access Charge (TAC). However, since the transmission assets owned by the California municipals, including COTP, are relatively new investments and cost more than the older transmission assets owned by PG&E and other IOUs, the
IOUs are attempting to limit the investment recovery of the municipally owned transmission. In contrast, the IOUs as original PTOs, are recovering 100% of their transmission investments and operating costs.

While NCPA is intervening at FERC and negotiating with PG&E to bilaterally change the terms of the RIA or to extend the existing IA, NCPA and Palo Alto are pursuing other options to obtain transmission and generation interconnection services.

**Analysis of Palo Alto’s Options after the IA Expires on March 31, 2002**

The City is presently actively pursuing four distinct options to obtain transmission services.

A. **Extend the present IA, until satisfactory arrangements are worked out:** Renegotiate a 12-month extension of the IA with PG&E jointly with NCPA pool members and Silicon Valley Power. NCPA has identified various ways to implement this policy by ensuring support of FERC and/or the ISO. This option might provide the best transmission access charge (TAC) with a potential minimal increase in the IA rate. This option preserves Palo Alto’s flexibility to pursue other long-term options. The ability for parties to agree to such an extension is uncertain.

B. **Use ISO transmission service as a PTO:** Join the ISO as early as July 1, 2002 and hand over operational control of the City’s share of COTP. The main advantage of this option is that Palo Alto can recover some or all of its share of COTP, which amounts to $1.4 million per year if full recovery is obtained. This is the option contemplated under the RIA filed by PG&E.

While the advantage of Option B over Option A is the recovery of $1.4 million related to COTP, actively joining the ISO may hamper City’s ability to pursue other options. The unstable structure and lack of independence of the present ISO, the complicated market rules and settlement procedures, the relatively high cost of obtaining services, and the uncertainty of the future of ISO make Option B unappealing in the short run.

C. **Use ISO transmission service under the Wheeling Access Charge:** Obtain ISO transmission service without joining the ISO, based on the ISO’s Wheeling Access Charge (WAC). In this scenario, the transmission service would be provided by the ISO as a wheeling operation. Palo Alto would not hand over operational control of its share in the COTP. Accordingly, Palo Alto would not collect any amounts on COTP. Palo Alto would pay the TAC for utilizing both the high
voltage and low voltage grid similar to Option B. This option is inferior to Option B in economic terms due to no recovery of costs associated with COTP, however, it provides flexibility for Palo Alto to pursue other options. The mechanics of implementing this option are being discussed with the ISO and PG&E.

D. Setup and participate in a new transmission control area: Due to the unstable structure of the ISO and the possibility of a FERC-mandated Regional Transmission Organization being created to run the transmission grid in the long run, the municipal utilities in Northern California are contemplating setting up a new transmission control area. Western and Bureau of Reclamation participation is also anticipated. Studies have been commissioned to explore this feasibility. Sacramento Municipal Utility District (SMUD) is actively pursuing this option on its own and expects to operate its own control area by the end of 2002. SMUD is an active participant in evaluating the feasibility of the Northern California wide municipal control area and is open to expanding it’s control area operation to other municipal utilities.

Since Palo Alto does not have local generation nor is the City directly connected to the Western transmission system, the recognition of Palo Alto’s right for firm transmission service until year 2050 under PG&E’s Stanislaus Commitment of 1991 is key for the City to participate in this option.

Cost Implications and Relative Merits of Future Transmission Service Options

Palo Alto’s electric customers presently pay approximately 7¢/kWh for bundled (commodity, transmission and distribution) electric service, of which 0.43¢/kWh (or 6% of the cost of bundled electric service) is related to costs associated with transmission services. However, the present transmission rates are expected to increase in the near future, irrespective of the option pursued by the City. The cost increase is a result of the improvements being made to the transmission system, ISO operating costs expected to be passed on, and the expiration of some of the ‘transmission rate locks’ which were in place under existing agreements. The transmission cost incurred by the City last year and future projections are presented below.
### Palo Alto Transmission Cost: Actual & Projections

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Present Cost FY00-01</th>
<th>Future Cost Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Transmission Cost (M$/year)</td>
<td>4.75 M$</td>
<td>6.0 – 9.5 M$/yr</td>
</tr>
<tr>
<td>Unit Cost of Transmission (cents/kWh)</td>
<td>0.43¢/kWh</td>
<td>0.6 – 0.9 ¢/kWh</td>
</tr>
<tr>
<td><strong>Detail</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western-PG&amp;E Wheeling Charge</td>
<td>2.5</td>
<td>3.0 - 4.0</td>
</tr>
<tr>
<td>PG&amp;E IA Charges</td>
<td>0.85</td>
<td>0 - 1.5</td>
</tr>
<tr>
<td>COTP Debt and O&amp;M Charges</td>
<td>1.4</td>
<td>0 - 1.4</td>
</tr>
<tr>
<td>ISO/Control Area Charges</td>
<td>-</td>
<td>1.0 - 3.5</td>
</tr>
<tr>
<td>Total Transmission Cost</td>
<td>4.75</td>
<td>6.0 – 9.5</td>
</tr>
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</table>

Transmission unit costs could increase to 0.6-0.9 ¢/kWh. These projected increases have already been included in the City budgeting and rate making process. The range of costs reflects the uncertainties. The total cost range in the table reflects the range of possible total cost and is not the addition of individual cost component ranges. Maintaining the flexibility of long-term options may result in short-term costs increasing to the higher end of the spectrum.

The cost variation between the four options is mainly related to the avoidance of some of the ISO charges and the potential to have the COTP cost reimbursed by the ISO. The transmission service is provided under the PG&E structure under Option A, while Option B & C describe ISO service structure, with Option D a more independent municipal control area structure. Any one of these options may become attractive depending on the outcome of various negotiations in progress at present. Under each of the four options, the common thread is to have PG&E recognize Palo Alto’s rights for firm transmission service under the Stanislaus Commitment. NCPA is prepared to litigate this issue if an amicable agreement is not reached.

In discussion with NCPA staff at the Utilities Advisory Commission (UAC) meeting on October 3, 2001, UAC Commissioners urged NCPA to take a long-term view and
contemplate the impacts of FERC mandated RTO structure on the future transmission service needs of the City. This report was presented to the UAC at its January 9th meeting.

Future Outlook
The TAC settlement talks are in progress in Washington, D.C. under the direction of the FERC. These negotiations will influence the basis of assessing transmission rates for the different regions within California. They will also influence the cost recovery structure of transmission investments made by municipal utilities. NCPA is representing Palo Alto in these negotiations, and a settlement might be reached in the coming months. An acceptable settlement is a desirable precursor to Option B. The need to resort to litigation to ensure that PG&E recognizes its Stanislaus commitments seems increasingly likely. The Council will be kept informed of these developments in the coming months.

Palo Alto will continue to be actively involved in evaluating the transmission services options available to the City. The options will be evaluated based on the objective of obtaining transmission services at low cost and under a stable structure that is appropriate for a load serving entity like Palo Alto.

POLICY IMPLICATIONS
Handing over the operational control of Palo Alto’s share of COTP will have policy implications related to private use of investments made with municipal tax exempt bonds. Bond counsel advice and IRS clarification is being sought by NCPA. FERC jurisdiction over municipal utilities in determining transmission rates is another aspect of the negotiations presently under way.

These recommendations meet the objectives outlined in the Utilities Strategic Plan. Specifically, the recommendations meet the Key Strategy No. 2 of “Preserve supply cost advantage compared to market prices”

Depending on the outcome of various ongoing negotiations, Utilities staff may return to the Council as early as thirty days from now, with contracts related to implementing a chosen strategy.

PREPARED BY:

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