TO: HONORABLE CITY COUNCIL  
FROM: CITY MANAGER  
DEPARTMENT: UTILITIES  
DATE: JULY 15, 2002  
CMR: 298:02  
SUBJECT: REQUEST TO AUTHORIZE THE CITY MANAGER TO EXECUTE REPLACEMENT AGREEMENTS RELATED TO ELECTRIC TRANSMISSION INTERCONNECTION SERVICES

REPORT IN BRIEF

A number of agreements need to be executed by the City and by Northern California Power Agency (NCPA) on behalf of the City in the coming weeks and months to replace the Pacific Gas and Electric Company (PG&E) Electric Transmission Interconnection Agreement (IA). The IA terminates on September 1, 2002. The new set of agreements will continue to provide the City the capability to connect City-owned and contracted generation resources located outside the City limits to the City’s electric load. The new set of agreements will have a number of signatories including NCPA; NCPA member cities including Palo Alto; PG&E; and the California Independent Systems Operator (CAISO, the successor transmission system operator that replaced PG&E after the electricity market deregulation in California in 1998). The combination of the three agreements recommended in this report will allow the City to operate with reasonable operational and cost certainty in the CAISO environment upon the termination of the PG&E IA.
RECOMMENDATION

Staff recommends that Council authorize the City Manager to execute on behalf of the City the following agreements and any related ancillary agreements that may be required to ensure a reliable transmission interconnection:

1. Letter Agreement with NCPA that will formally commit the City to the Aggregated Metered Sub System Operator (MSSO) Agreement between NCPA and the CAISO
2. PG&E Replacement Interconnection Agreement (RIA) between PG&E, NCPA, and NCPA member Cities including Palo Alto
3. Schedule Coordination Service Agreement between the City and NCPA

BACKGROUND

The City of Palo Alto Utilities Department (CPAU) operates the electric utility with the objective of providing reliable service at low and reasonable cost to the residents. In order to electrically connect the City’s electric load to City-owned and contracted generation resources located outside the City, the City requires third party transmission services. The City has obtained this service from PG&E for decades, and has relied on the PG&E transmission system since the 1920's. The City, along with other NCPA member cities, has been a signatory of the PG&E Interconnection Agreement since 1983. The PG&E IA provides, among other things, transmission interconnection services between City load and City-owned NCPA generation projects.

In July 1997, PG&E exercised its three-year notice right to terminate the IA, which would have resulted in a termination date of August 2000. A number of interim agreements extended the IA past August 2000. In August 2001, PG&E unilaterally filed with the Federal Energy Regulatory Commission (FERC) its proposed replacement IA (RIA) to be effective April 1, 2002. The RIA by PG&E provides basic protocols to physically connect loads and generation resource to the transmission grid, but defers to the CAISO to provide the transmission and control area services required by the City and other NCPA member cities. FERC, upon NCPA’s request, delayed the effective date of PG&E’s proposed RIA to September 1, 2002, and convened a number of technical conferences with NCPA, PG&E and the CAISO to facilitate the negotiation of an acceptable replacement arrangement by September 1, 2002.

Since September 2001, with input from City staff and other member cities, NCPA has been negotiating with the CAISO to develop a transmission arrangement that is well adapted for load serving entities like the City. The Aggregated Metered Sub System Operator (MSSO) Agreement now negotiated with the CAISO meets the City’s needs at this time, and provides reasonable operating protocols and defined cost and settlement mechanisms. These agreements are expected to be filed with FERC in July 2002 to meet the September 1, 2002 deadline.
Staff has kept the Utilities Advisory Commission (UAC) apprised of the City’s approach to obtaining transmission services and have incorporated Commission input in this regard (October 3, 2001; January 9, 2002, February 13, 2002, May 1, 2002). Council was provided an information report on the topic on January 28, 2002 (CMR:114:02).

DISCUSSION

The replacement to the IA negotiated with the CAISO will result in the City load and City-owned generation being treated as a Metered Sub System (MSS) in the CAISO-operated electric transmission system, with NCPA becoming an Aggregated Metered Sub System Operator (MSSO). Under these agreements, the City's electric demand will be metered along with the City's NCPA-owned generation and electric contracts. NCPA as an entity that aggregates all NCPA member city loads has the responsibility of balancing the metered demand of NCPA member cities with the electric supply contracts and generation resources operated by NCPA. A balanced load-resource schedule is then submitted to the CAISO to ensure the reliable operation of the overall electric transmission grid.

Key aspects of the MSS/MSSO agreement is briefly outlined below:

- Provides for load-following capability with NCPA-owned generation, whereby the City balances load and resources in real time and avoids the CAISO volatile real time market prices. This also enables the City to avoid certain CAISO overhead charges.

- Local generation, within City limits, will not be subject to CAISO transmission charges when plant output does not exceed City load. This retains the incentive for site generation within the City.

- City/NCPA retains local control over City/NCPA-owned generation resource. That is, the CAISO may not dispatch these units unless NCPA decides to participate in the CAISO-operated markets for energy and ancillary services.

- If the City maintains its full generation capacity and reserve requirements to meet its load, the City will not be required to participate in any "economic" blackouts which may occur in northern California due to other utilities' failure to procure sufficient capacity to meet their loads.

- The scheduling and real time flexibility of the City’s Western contract is maintained until 2004, with some limitations on the magnitude of the change of schedules. This provides an excellent tool to efficiently meet changing City loads without being fully exposed to the CAISO’s volatile ancillary services markets.
The agreement does not recognize the City’s claim for firm-transmission rights under the past commitments (Stanislaus Commitments) made by PG&E. However, the City’s rights to seek legal determination of this issue at a later time in some other appropriate venue are preserved.

In order to transition from the IA framework to operations under the MSS/MSSO protocols, a number of agreements have to be signed by NCPA, NCPA member cities including Palo Alto, PG&E and the CAISO. To execute these agreements to meet the September 1 deadline, the City’s NCPA Commissioner voted, at the June 27, 2002 NCPA Commission meeting, to authorize the NCPA General Manager to execute the following three agreements on the City’s behalf. This rapid City/NCPA authorization is also necessary to accommodate FERC staff review and the FERC order drafting schedule which necessitated that some combination of a settlement package and an ISO filing be filed at FERC on or about July 1, 2002.

Agreements Executed by NCPA:

A) MSSO Agreement with the CAISO - provides for the scheduling and settlement protocols for NCPA to represent the City's power plants and load in the CAISO operated grid.

B) PG&E Replacement IA - provides for the physical interconnection of NCPA power plants and City load to the PG&E owned transmission grid.

C) FERC Partial Settlement Agreement in IA Termination Docket - legal vehicle by which the CAISO will file the MSSO agreement and other related CAISO tariff changes; the revised PG&E replacement IA is consistent with the MSSO Agreement.

In addition to the above agreements signed by NCPA on behalf of its members, the three agreements listed below need to be signed by the City. Agreement 1 and 2 below will formally make the City a party to the agreements signed by NCPA on the City’s behalf. Agreement 3 will be between NCPA and the City, and will formally obligate the City to pay the Scheduling Coordinator charges incurred by NCPA on the City’s behalf.

1) City/NCPA Letter Agreement - acknowledges that NCPA is signing the MSSO agreement with the CAISO and that the City agrees to be bound by the relevant conditions thereto.

2) PG&E Replacement Interconnection Agreement - provides for the physical power interconnection between the City load and PG&E's transmission grid (NCPA will execute this agreement as well with regard to the NCPA generating plants).

3) NCPA Schedule Coordination Services Agreement - designates NCPA as the City's
Schedule Coordinator to interface with the CAISO on the City's behalf as well as indicate the manner in which CAISO charges and respective NCPA staff charges will flow through to the City (this is currently under development).

Timely execution of these agreements is imperative for the City to obtain transmission services from the CAISO on September 1, 2002. Staff will work with the City Attorney’s Office and NCPA to have agreements 1 and 2 ready for execution by the City Manager in July 2002, and agreement 3 completed by September 1, 2002.

The table below summarizes the six agreements discussed above.

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<tr>
<th>Agreement</th>
<th>What It Does</th>
<th>Who Signs and Timeline</th>
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<tbody>
<tr>
<td>A. MSSO Agreement</td>
<td>Transmission and control area services:</td>
<td>NCPA on behalf of member cities, ISO</td>
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<td>- Real time load/resource balancing</td>
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<td>- Aggregation of pool loads</td>
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<td>- Avoids transmission cost for local generation</td>
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<td>B. PG&amp;E Replacement IA</td>
<td>Provides for the physical interconnection of NCPA power plants and City load to the PG&amp;E owned transmission grid;</td>
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<td>C. FERC Partial Settlement Agreement in IA Termination Docket</td>
<td>The partial settlement agreement is the legal vehicle by which the CAISO will file the MSSO agreement and other related CAISO tariff changes, and the revised PG&amp;E replacement IA which consistent with the MSSO Agreement</td>
<td>NCPA on behalf of member cities, PG&amp;E, ISO</td>
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<tr>
<td>1. City/NCPA Letter Agreement to be party to the NCPA MSSO Agreement with CAISO</td>
<td>Acknowledges that NCPA is signing the MSSO agreement (Agreement A above) with the CAISO and that the City agrees to be bound by the relevant conditions thereto;</td>
<td>City and other NCPA member cities to be party to agreement A above</td>
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<td>2. PG&amp;E Replacement IA</td>
<td>Acknowledges that NCPA is signing the PG&amp;E replacement IA (Agreement B above) with PG&amp;E and that the City agrees to be bound by the relevant conditions thereto;</td>
<td>City and other NCPA member cities to be party to agreement B above</td>
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<td>3. NCPA Scheduling Coordinator Agreement</td>
<td>Obligates the City and other NCPA members to pay NCPA charges that NCPA will incur on behalf of the cities as their Scheduling Coordinator with the CAISO</td>
<td>City and other NCPA member cities with NCPA</td>
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ALTERNATIVES

Given that there is only one electric transmission grid and grid operator in California, the City has three alternatives in the short-term. The first is to be a party to and sign existing agreements designed by the CAISO for CAISO electricity market participants (Participating Generator Agreements (PGAs) for City-owned NCPA generation and Utility Distribution Company (UDC) Agreements for the City’s electric load). This alternative is not well-suited for utilities like Palo Alto that have retained the obligation to serve load and which own generation resources to serve this, since it results in higher costs and less control over City-owned assets. A second alternative is to negotiate an MSS agreement directly with the CAISO. This alternative will result in higher staff, legal and consultant costs and does not leverage the joint action opportunities by utilizing NCPA. The third alternative is the negotiated MSS/MSSO agreements, designed for entities with the obligation to serve load with their own generation resources at low and reasonable cost, with some level of cost certainty. This is the recommended alternative.

Three potential long-term alternatives are available. The first is to build generation within the City and be independent of the transmission grid. A second long-term alternative is to build the City’s own transmission to connect to City load with City-owned generation. While City continues to monitor the feasibility of these two options, they are very expensive and technically infeasible to implement at this time. A third alternative that could be implemented in the next two to three years is to establish a separate transmission control area within the CAISO transmission control area. The City, along with other NCPA members, is reviewing this option, but this option is not achievable in the short-term.

RESOURCE IMPACTS

Interconnection and transmission services in the CAISO environment is projected to be more costly than under the past PG&E IA, which will no longer be available to the City. The higher cost is due to numerous factors. Part of the cost increase is due to higher CAISO overhead costs related to operating electricity markets, while the remainder is due to the expiration of certain cost caps the City enjoyed under the IA with PG&E. Currently, the City's total transmission (including transmission asset debt payments and Western wheeling cost), ancillary services, and control area operator charges are approximately 0.5 cent/kWh, or about $5 million annually. These costs do not include any congestion-related costs that may be imposed on the City due to the CAISO’s and FERC’s initiatives to restructure the California electricity market.

Under the proposed CAISO arrangement, these costs are projected to increase to approximately 0.8 - 1.0 cents/kWh, or between $8 million and $10 million per year. These
cost increases were anticipated by the City and have been incorporated in the City’s budget and electric retail rate-making process. The City and NCPA staff will carefully monitor resulting CAISO charges and take all prudent actions to maintain such charges at reasonable levels.

**POLICY IMPLICATIONS**

This recommendation is consistent with the Council-approved Utilities Strategic Plan (USP) and Electric Portfolio Planning Objectives. Specifically, this recommendation plays a strong part in CPAU’s efforts to maintain low and stable rates (Portfolio Planning Objective 1); it supports USP Strategy 2 – “Maintain a supply cost advantage compared to the market prices”. Strategy 3 – “Streamline and manage business processes to allow CPAU to work efficiently and cost effectively” is supported through leveraging joint action with NCPA and other member cities in obtaining transmission services.

**ENVIRONMENTAL REVIEW**

These services do not constitute a project for the purposes of the California Environmental Quality Act.

**ATTACHMENTS**

A. Resolution of the Council of the City of Palo Alto Authorizing the City Manager to Execute Replacement Agreements Related to Electric Transmission Interconnection Services

B. Aggregate MSSO Agreement with the CAISO (Agreement A in the CMR) - Draft

C. PG&E Replacement IA (Agreement B in the CMR) - Draft

D. Partial Settlement Agreement (Agreement C in the CMR) – Draft

E. Letter Agreement with NCPA To Formally Commit the City to the MSSO Agreement (Agreement 1 in the CMR) – Draft

F. NCPA Scheduling Coordinator Agreement (Agreement 3 in the CMR) – Draft