

Agenda Report

June 28, 2004

To:

City Council

Through:

Municipal Services Committee

From:

City Manager

Subject:

Authorization to enter into Metered Subsystem Agreement

with the California Independent System Operator

RECOMMENDATION:

It is recommended that the City Council authorize the City Manager to enter into a Metered Subsystem Agreement with the California Independent System Operator.

It is further recommended that the City Council authorize the City Manager to sign amendments to existing contracts with the California Independent System Operator that may be required from time to time.

BACKGROUND:

The Metered Subsystem Agreement (Agreement) is an alternative contractual arrangement with the California Independent System Operator (ISO) that is available to municipal utilities within the ISO control area. It incorporates the basic function and terms covered in pro-forma Utility Distribution Company (UDC) Agreement and Participating Generator Agreement (PGA) that are further described below. The Agreement would replace Pasadena's existing UDC and PGA agreements already in place with the ISO.

Existing ISO Agreements

In 1999, the City Council authorized the Pasadena Water and Power (PWP) General Manager to enter into a number of contracts with the ISO, including the UDC, PGA, meter service agreement, metered entity agreement, Scheduling Coordinator agreement, and Financial Security Agreement. The UDC and PGA contain the terms most relevant to our business relationship with the ISO.

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AGENDA ITEM NO. 5.D.2.

Utility Distribution Company Agreement:

The UDC Agreement defines rights and obligations of load-serving entities within the ISO control area. The ISO is responsible for performing control area duties required by the Western Electricity Coordinating Council (WECC) and the North American Electric Reliability Council (NERC), including procurement of operating reserves and other ancillary services through competitive markets. The City is obligated to pay for real-time energy purchased by the ISO to meet Pasadena Water and Power (PWP) loads and a pro-rata share of the ISO's costs incurred to purchase ancillary services. To ensure regional reliability during system contingencies or emergencies, PWP is obligated to participate in rolling-blackouts on a pro-rata basis with other UDCs based on ratio of peak demand during prior year.

Participating Generator Agreement:

The PGA defines rights and obligations as a participating generator in the ISO market. All generators within ISO control area larger than 1MW are required to execute PGA (although Riverside successfully challenged this requirement for small generators within their service territory that will be used strictly to serve Riverside's energy needs). The PGA provides PWP's local generators full access to ISO ancillary service markets, and obligates PWP to make unused local generation capacity available to the ISO during system emergencies.

Benefits of ISO Agreements to Pasadena

Under "stable" market conditions, the control area services provided by the ISO markets lead to increased reliability and lower cost to meet native load operating reserve requirements. By executing the ISO agreements, PWP gained access to a larger resource pool to provide backup for PWP's generation and transmission, plus also gained the benefit of lower individual reserve requirements. Under these agreements, PWP's staff and infrastructure resource and reporting requirements were reduced. PWP gained access to liquid markets for lower-cost and simpler energy transactions in the ISO's SP-15 market zone. The agreements provide the opportunity to utilize local generation resources more economically by reducing operating reserve constraints and providing access to valuable ISO ancillary service markets, resulting in additional revenue for excess generation resources. The additional generator usage flexibility also made it easier to manage environmental constraints. Lastly, providing PWP customers with choice of service providers through direct access was made possible using ISO protocols and procedures set up in these agreements.

ISO Contract Issues and Liabilities

After nearly five years of operating experience under these agreements, a number of very significant issues and liabilities have been identified, particularly during times when the ISO's markets are unstable. Under the terms of Pasadena's UDC Agreement, PWP customers were forced to endure rolling blackouts in years 2000 and 2001, even though PWP had sufficient resources, was supplying excess local generation to support statewide reliability, and was not receiving payment for these services. Under the FERC "must offer" order and terms of the PGA, the ISO was able to force PWP's local generation to operate, sometimes without compensation due to payment default or at a loss due to arbitrary price limits imposed by FERC or the ISO.

There are no effective remedies for payment default by the ISO under the ISO tariff and existing agreements. The ISO acts as a clearing house and can only pay out funds to sellers that were actually collected from buyers of market services. ISO non-payment does not trigger any remedies or relieve PWP of any obligations.

Even under normal market conditions, the ISO has the unilateral right to amend the contracts through tariff revisions filed at, and approved by FERC. This right has led to a complete lack of contract "durability", as the ISO has filed 48 tariff amendments in approximately 54 months of operation. Certain cost allocation methodologies unfairly allocate costs resulting from other parties needs or shortfalls to PWP. The UDC includes a two-year termination notice provision that may prevent the City from entering into more attractive alternative arrangements.

The ISO's implementation of the PGA and FERC's must-offer order has occasionally resulted in inefficient, infeasible, and sometimes potentially damaging dispatch instructions. Unusually high turbine blade erosion damage was noted during the recent overhauls of Broadway Units 2 and 3 that may be at least partially attributed to ISO dispatch systems. Conversely, by not responding to some of these infeasible dispatch instructions, PWP has incurred significant penalty charges and was even accused of market manipulation.

Potential Alternatives to ISO Agreements

In the past, PWP has informed the Council of potential alternatives to the ISO agreements, including reestablishment of the Pasadena local control area, joining with the Los Angeles Department of Water and Power (LADWP) control area, or the creations of a new municipal control area entity with other local municipal utilities. Each of these options has significant lead-time, physical and

operations challenges, and involves new contract development. Such arrangements would likely improve reliability and price stability during ISO market perturbations, however their economic benefits (versus the ISO agreements) may be limited.

PWP is still in discussion with other municipal utilities to evaluate feasibility of alternative control area and transmission arrangements. While these developments proceed, a new alternative arrangement with the ISO has been developed that would mitigate some of Pasadena concerns and provide incremental benefit.

Metered Subsystem Agreement

The Metered Subsystem Agreement (commonly called "MSS") is an alternative to the UDC and PGA agreements, which were developed to implement retail and wholesale competition within IOU service territories envisioned by AB 1890.

From the outset of the ISO design and development, municipal utilities have promoted the Metered Subsystem concept as an alternative that better fits the needs of vertically-integrated, locally controlled utilities that wish to maintain their obligation and ability to reliably meet the needs of their electric customers. Unfortunately, the MSS concept was not developed until mid 2002, when looming transmission contract expirations for various Northern California municipals forced the issue. These utilities worked with the ISO to develop the MSS Agreement and tariff language and subsequently entered into MSS Agreements.

In its current form, the MSS Agreement addresses many of the issues Pasadena has with the UDC and PGA and offers improvements, including:

- Language that eliminates PWP's blackout obligations when PWP has sufficient resources and the blackout is a result of other ISO entities having scheduled insufficient resources to meet their loads;
- Improved contract durability through specific contract terms that supercede tariff language and subsequent revisions;
- Elimination of some cost obligations arising from other ISO members' resource deficiencies, provided that PWP is not deficient;
- Eliminates ISO's unilateral rights to call PWP's local generation except during system emergencies; and,
- Provides the option to treat all local generation as a single "system unit" that increases operating flexibility to potentially dispatch our units more economically and/or reduce potential penalties.

The Agreement includes a permanent six-month termination provision, which is a significant improvement over the two-year termination provision in PWP's UDC. The six-month notice period has strategic value in limiting the amount of time Pasadena would have to wait should the ISO tariff or market conditions become intolerable or if other alternatives to PWP's ISO agreements become available. A comparison table of the MSS and UDC is on the following page.

No significant drawbacks, as compared to the current UDC and PGA agreements, have been identified in the MSS. Although the terms of the MSS Agreement are substantially negotiated, PWP is working with the ISO and other municipal utilities as well to improve on the MSS language with respect to reliability, the use of local generation, and to incorporate PWP's specific operational needs and concerns.

Amendments to ISO Agreements

Periodically, the ISO Agreements must be amended to account for changes to PWP's or the ISO's resources, ISO Tariff changes, and for other administrative purposes. For example, the replacement of Broadway Units 1 and 2 with Glenarm Units 3 and 4 necessitated changes to the PGA. Execution of the MSS Agreement may necessitate changes to the metering agreements PWP has in place with ISO.

Comparison of MSS Agreement versus Current UDC and PGA Agreements

Issue	MSS	UDC + PGA
Contract Termination	Six-month termination notice	Two-year termination notice
Contractual Language	Although substantial the same,	Pro-forma contract with virtually no
Flexibility	each MSS can be tailored to fit a	accommodation for special
	utility's specific circumstances	circumstances
Contract Durability	Any terms specified in the	Tariff terms supercede agreement
	agreement supercede tariff	and may be unilaterally changed by ISO, subject to FERC filing
Blackouts - Resulting	Can be avoided if scheduled	ISO has revised UDC tariff language
from Underscheduling	resources meet or exceed load	to match MSS agreement language
by Others	Could be <u>larger</u> if PWP under-	
	schedules resources	
Blackouts Resulting	Shared pro-rata by all LSE's	Same
from System		
Contingencies Contract Remedies	Companies de LIDO - DOA	FFDO
for non-payment or	Currently similar to UDC + PGA To be negotiated	FERC complaint or arbitration per
non-performance by	To be negotiated	ISO Tariii
ISO		
Local Generation Unit	ISO's right to call unused capacity	ISO has right to call unused capacity
Operations	from local generation limited to	from local generation at any time
	emergency situations	,
	"System Unit" option with	Each generating unit treated
	flexibility to dispatch more	individually and subject to penalties
	economically and reduce	for deviations in excess of 3% of
C	performance penalties	schedule
System Operations	Allows optional use of internal resources to follow load.	ISO follows load and charges market
	providing more cost certainty	price for services, plus additional reserve or capacity charges and
	May increase reporting	potential penalties when actual loads
	requirements and settlement	exceed scheduled load
	complexity	SASSGE CONTOURING TODAY
Costs	Certain ISO costs are allocated	Most costs are spread evenly to all
	more fairly, and some charges	loads, regardless of cost causation
	may be avoided altogether (such	
	as costs associated with ISO	
	summer reliability programs)	

FISCAL IMPACT

There are no direct costs associated with entering into the Agreement. No staffing impact is expected, however PWP may incur as much as \$100,000 in one-time costs associated with software modifications to incorporate scheduling and settlement changes. Such costs are budgeted under CIP Project Number 3136 "Power System Scheduling System." PWP anticipates that ongoing ISO charges and fuel costs for local generation will be lower than if PWP were to continue operating under the existing UDC and PGA agreements. Any such cost savings would translate directly into Energy Charge rate reductions, or offsets against increases in other expenses recovered in the Energy Charge.

Respectfully Submitted,

ČÝNTHÍA J. KURTZ

City Manager

Prepared by:

ERIC R. KLINKNER Business Unit Director

Power Supply Business Unit

Approved by:

PHYLL(\$ E. CURRIE

General Manager

Pasadena Water and Power