

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

8-3

• Board of Directors Engineering and Operations Committee

7/12/2016 Board Meeting

Subject

Authorize 50-year agreements with the Western Area Power Administration and the Bureau of Reclamation for the purchase and delivery of energy and capacity from the Hoover Power Plant

Executive Summary

With the unanimous support of the existing Hoover power contractors in the Lower Colorado River Basin States (Arizona, California, and Nevada), Congress passed into law the Hoover Power Allocation Act of 2011 (2011 Act). The 2011 Act directs the Western Area Power Administration (Western) on the marketing of Hoover power in anticipation of the expiration of the current contracts on September 30, 2017. Specifically, the 2011 Act directs Western to issue 50-year, cost-based contracts to existing contractors for 95 percent of their current allocations of energy and capacity, and market the remaining 5 percent resource pool to new entities.

Western completed its marketing process in December 2014, and made a final allocation of the 5 percent resource pool. The existing contractors and new allottees have negotiated the terms of an electric service contract with Western and an operating agreement with Western and the Bureau of Reclamation (Bureau). Staff recommends that the General Manager be authorized to execute these agreements on behalf of Metropolitan.

Details

The Boulder Canyon Project Act of 1928 authorized the construction of the Hoover Dam and Power Plant contingent on the execution of power contracts that assured reimbursement of the federal investment over 50 years. Metropolitan was a successful applicant for a power contract to provide the energy required to pump its Colorado River water (CRW) supplies through the Colorado River Aqueduct (CRA). To utilize the power from Hoover, Metropolitan constructed and operates a 230-kv transmission system that delivers the Hoover power to its pumping plants on the CRA.

When the initial contract was due to expire in 1987, Metropolitan supported congressional action authorizing renewal of the initial contracts – the Hoover Power Plant Act of 1984 (1984 Act). The 1984 Act provided Metropolitan with its current 30-year contract for power generated at Hoover Dam that will expire on September 30, 2017.

In 2007, the existing contractors commenced discussions on how to address the approaching termination of the Hoover power contracts. In the absence of further congressional direction, Western would be responsible for establishing the terms for marketing the power. This would have created risks of cuts in power allocations and a short contract term. Ultimately, all fifteen existing contractors from the three Lower Colorado River Basin States were able to agree to, and support congressional approval of, legislation directing the continuation of 95 percent of the current energy and capacity allocations. The remaining 5 percent was left for Western to market. These arrangements were included in the 2011 Act. In addition, the 2011 Act expanded the marketing pool to include Indian Tribes and directed that the new contracts should have a term of 50 years while retaining the cost basis to determine the price to be paid for capacity and energy. Also, all new contractors are required to pay a proportionate share of their state funding obligation for the Lower Colorado River Multi-Species Conservation

Program (LCR MSCP) that provides Endangered Species Act coverage for water and power operations on the Colorado River.

Western completed the marketing of the 5 percent resource pool in December 2014. Upon identification of the final set of 31 new allottees, all parties joined in discussions on the specific terms of the contracts. Negotiations and drafting were completed in May 2016, and the final contracts are required to be executed by October 1, 2016.

Metropolitan's new contract will provide it with 1,277,400 MWh of firm energy annually, and 250 MW of capacity. Historically, the power available to Metropolitan under its Hoover contract has provided an average of 60 percent of the power required to move CRW supplies through the CRA.

The price of the Hoover energy and capacity is required by the Boulder Canyon Project Adjustment Act of 1940 to be based on the costs of operating the Hoover Dam and Power Plant. Later statutes provided that power revenues pay the cost of the Hoover Dam visitor facilities that are not covered by visitor fees and merchandise sales and fund salinity control projects in the Colorado River Basin. Each year, the revenue requirements are calculated by Western and the Bureau, and charged pro rata to contractors based on their allocations of energy and capacity. For the past ten years, Metropolitan's annual cost of Hoover energy and capacity has averaged \$17.7 million, or a little more than \$16/MWh. Future costs are expected to be comparable.

One of the contractors' concerns in the negotiations was the potential impact on the unit cost of power in the event generation at Hoover is reduced due to low Lake Mead elevations over the course of the contract. Western and the Bureau agreed to include provisions for cost containment if capacity falls below 1,000 MW for more than 45 days. This would occur at a Lake Mead elevation of about 995 feet. Before reaching this level, consultations to manage Lake Mead storage would occur among the Colorado River water contractors. The current elevation of Lake Mead is approximately 1,072 feet.

There are two agreements that have been negotiated and are required to be executed for Metropolitan to receive Hoover power. The Electric Service Contract would be executed with Western and establishes Metropolitan's allocation of energy and capacity and the charges for the service. The Implementation Agreement would be executed with both Western and the Bureau and provides procedures for contractor participation in the planning and operation of the Hoover Power Plant, for dispute resolution, and for collection of contractor payments for the LCR MSCP. Metropolitan has had a contract for Hoover power since 1930, on similar terms to those contained in the proposed Energy Service Contract. Staff recommends that the General Manager be authorized to execute the two Hoover power agreements.

PRINCIPLE PROVISIONS OF THE TWO AGREEMENTS

Electric Service Contract Provisions

- Effective October 1, 2017 with a 50-year term
- Metropolitan receives 12 percent of the capacity (250 MW) and 27.1 percent of the energy (1,277,400 MWh annually)
- Capacity and energy price established annually based on cost of service plus net Visitor Center costs and Colorado River salinity control contribution
- Capacity and energy shortages and surpluses are shared on a pro rata basis
- Any amount of capacity or energy from the 5 percent resource pool not under contract by October 1, 2017 shall be reallocated to the current contractors
- Default and dispute resolution actions identified

Implementation Agreement Provisions

- Effective October 1, 2016 (for planning and budgetary purposes) and remains in effect until replaced by a successor agreement
- Retains committee structures established under the prior agreement to facilitate the exchange of information and consensus building between the contractors, Western, and the Bureau, including a formal review process of decisions, if requested

- Requires meetings to review contingency planning and cost containment actions should Hoover capacity drop to specified levels
- The Bureau will collect new contractors' share of LCR MSCP costs and amounts to be reimbursed to current contractors for certain payments made before October 1, 2017
- Provides for reimbursement of certain investments in long-term facilities and equipment made by contractors under the 2017 agreements from subsequent contractors under post-2067 agreements
- Establishes the process for a periodic audit of Hoover financial records

Policy

Policy principle on Energy/Restructuring (Minute Item 41941, June 11, 1996)

Policy principle on Energy (Minute Item 47598, August 19, 2008)

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is statutorily and categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action involves the purchase, transmission and use of power generated at Hoover Power Plant and associated facilities located in Nevada and Arizona, which is subject to environmental review pursuant to the National Environmental Policy Act. Moreover, none of the emissions or discharges from this power generation would have a significant effect on the environment in California. Accordingly, the proposed action qualifies under a statutory exemption (Section 21080(b)(14) of the Public Resources Code and Section 15277 of the State CEQA Guidelines). In addition, the proposed action involves the continued operation of existing facilities, including the Hoover Power Plant, electric transmission lines and pumping plants on the Colorado River Aqueduct, with negligible or no expansion of their use. As such, the proposed action qualifies under a Class 1 categorical exemption (Section 15301(b) of the State CEQA Guidelines). Finally, where it can be seen with certainty that there is no possibility that the proposed action in question may have a significant effect on the environment, the proposed action is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is statutorily and categorically exempt and is not subject to CEQA pursuant to Section 21080(b)(14) of the Public Resources Code and Sections 15277, 15301(b) and 15061(b)(3) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action is statutorily and categorically exempt, and is not subject to CEQA, and

Authorize the General Manager to execute the Hoover Electric Service Contract with the Western Area Power Administration and the Implementation Agreement with the Western Area Power Administration and the Bureau of Reclamation.

Fiscal Impact: Execution of these agreements will allow Metropolitan to continue to benefit from below market, cost-based hydropower produced at the Hoover Power Plant.

Business Analysis: Metropolitan would retain a highly flexible and valuable energy asset for Colorado River Aqueduct operations. In addition, the hydro generation from Hoover Dam does not emit greenhouse gases and does not require any actions under California's Cap-and-Trade program.

Option #2

Do not authorize execution of the Hoover Electric Service Contract and the Implementation Agreement. **Fiscal Impact:** Unknown additional expenses for supplemental power purchases at market prices. **Business Analysis:** The Hoover Power Plant provides Metropolitan with cost-based hydropower that is necessary to pump water supplies through the Colorado River Aqueduct. Replacement of this power with market-based power would likely result in increased costs and an increase in greenhouse gas emissions associated with the operation of the Colorado River Aqueduct.

Staff Recommendation

Option #1

6/27/2016 Green Date

Group Manager, Water System Operations

6/29/2016 Date Kight General Mana

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