

WEST BASIN MUNICIPAL WATER DISTRICT

NOVEMBER 3, 2004 - Water Resources
Little, Dear

NOVEMBER 22, 2004 - Board Meeting

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ACTION CALENDAR

OCEAN-WATER DESALINATION UPDATESUMMARY:**Warm Water Conversion Project**

The District has been moving forward with the conversion of the Ocean-Water Desalination Pilot Plant's feed water source at the El Segundo Power Plant. Phase 1 consists of excavating and locating an underground warm water connection point over the Power Plant's ocean outfall. In July, 2004, the Board approved the Co-Acting General Managers to execute a construction contract with Environmental Engineering and Contracting for \$32,230 to perform excavation services at El Segundo Power. Excavation revealed that the primary connection point was blocked by an undocumented underground utility. Continued coordination with El Segundo Power has revealed an alternate access location. The alternate location allows for potential access through a pressure maintenance hole located directly over the Power Plant's twelve foot diameter outfall. Evaluation of this access point has revealed that the maintenance hole cover has experienced severe corrosion and additional measures beyond the original "Scope of Work" will be necessary to achieve access to this location. The Contractor believes this new element of work would be beyond their area of expertise. El Segundo Power will provide the District with a recommendation of another contractor that is qualified to work at their site and possesses the appropriate experience to perform this work.

In April, 2004, the Board authorized \$82,000 for United Water Service to hire a contractor to perform the Phase 2 Warm Water Conversion "Scope of Work". This work provides for the integration of a new ultrafiltration pretreatment unit and necessary enhanced piping, electrical and instrumentation work to allow operation on the Power Plant's post condenser effluent. Due to unforeseen field conditions and additional power supply needs in the ocean-water desalination research and development program, additional elements of work are needed to accommodate the necessary testing of the warm water "Scope of Work". These additional "Scopes of Work" include the addition of an increased 480V/100 amp power supply feed, supplemental equipment to maintain both a pre-condenser feedwater supply connection and new post-condenser feedwater supply connection, and electrical survey documentation of the District's base electrical load at the El Segundo Power Plant.

Staff is recommending that the Board authorizes funding to address the additional "Scopes of Work" for the following elements:

1. Executing a contract for an amount not-to-exceed \$25,000 with the recommended contractor from El Segundo Power to perform the maintenance hole access construction to achieve a warm water connection point; and

2. Amending the existing United Water Services contract to add \$65,000 to provide additional equipment and labor for the warm water conversion project and manage the base electrical load survey documentation at El Segundo Power.

California Energy Commission (CEC) and the Department of Water Resources (DWR) Research Participation

CEC and DWR have expressed an interest in participating in the Affordable Desalination Collaboration Research Project with matching contributions to that of West Basin's by contributing \$50,000 each. Both agencies have requested that their sponsorship of the Affordable Desalination Collaboration Research Project be managed through West Basin. Including the CEC and DWR contribution, West Basin will contribute a total \$150,000 towards this research effort.

Pilot Plant Memorandum of Understanding

The original three-year Ocean-Water Desalination Pilot Plant agreement will expire on December 31, 2004. Staff has forwarded an amendment to El Segundo Power requesting an extension of the no cost lease agreement for an additional two-years. El Segundo Power has been a major contributor to the District's Ocean-Water Desalination Program through site facilitation and ancillary support services. Additionally, El Segundo Power has been a major contributor to the desalination Program through the contribution of no-cost power for the Pilot Plant operations. Additional contribution has been provided by El Segundo Power during periods when the generating station is non-operable and power is purchased from the power grid at consumer costs (i.e., \$0.13/Kwhr) to power the generating station's on-site power needs and the District's Ocean-Water Desalination Pilot Plant. The combination of energy contribution from the El Segundo Power Plant and grid power have totaled more than \$150,000 in the past two years. With the expiration of El Segundo Power Plant's contracts with California at the end of 2004, El Segundo Power has advised staff that provisions will need to be made in the amendment agreement to reimburse El Segundo Power for future energy consumed for Pilot Plant operations. Staff will continue coordinating and negotiating the amendment agreement issues and will bring a recommendation to the Board in December.

Metropolitan Water District (MWD) Ocean-Water Desalination Agreement

Staff has been working with MWD and other desalination member agencies to generate a draft agreement for the ocean-water desalination subsidy that will reduce the cost of ocean-water desalination. The agreement covers specific performance criteria, potential wheeling and policy issues, accounting and reimbursement procedures, and general policy guidelines. Staff will be meeting with MWD staff in the next few months to refine the agreement. Staff will keep the Board apprised on the progress of these proceedings and will bring a more final version of the agreement to the Board for review upon completion.

Desalination Workshop

West Basin and Central Basin Directors attended an ocean-water desalination workshop on October 19, 2004. Staff provided an overview of the District's current progress on the Ocean-Water Desalination Pilot Plant, siting and policy issues, and future plans.

U.S. Desalination Coalition

The U.S. Desalination Coalition held its semi-annual Board meeting in Florida, on October 13-15. The following topics of accomplishments were reviewed:

- U.S. Desalination Coalition was formed and now has 14 members;
- HR 3834 was drafted and introduced into Congress;
- HR 3834 is sponsored by 34 members of Congress;
- Sub-Committee Chairman Pombo held a hearing on the bill, thus initiating the legislative record;
- Groundwork laid in raising the profile of desalination among policy members; and
- Nation-wide poll conducted showing large public support because it recognizes a water shortage threat as real.

The following items are future endeavors the U.S. Desalination Coalition will pursue:

- Build on 2004 progress; Reintroduce bill in House and Senate;
- Effort to enlist additional members of Congress as co-sponsors;
- Generate letters-to-the-editors in newspapers; and
- Furman Group (with Smith & Harroff) creates D.C. outreach campaign.

Proposition 50 Pre-proposal Meeting

West Basin and Central Basin hosted a joint Proposition 50 workshop with the Water Replenishment District on Wednesday, October 6, 2004. Several of the Districts' retailers attended the workshop to learn more about the potential grant funding opportunities available. Attendees were pleased with the information and the Districts' outreach effort in holding the workshop. Additional meetings will be held to determine the appropriate projects and collaboration with other agencies needed prior to submitting final proposals.

NWRI Visit

Staff provided a tour of the District's Water Recycling Plant and Ocean-Water Desalination Pilot Plant to Ron Linsky of NWRI and Alexander Likhotal from Green Cross International headed by former Russian President Mikhail Gorbachev. Mr. Likhotal was impressed by the District's conservation and water recycling programs and felt that there were many international applications that could be emulated on a smaller scale. Mr. Likhotal also expressed their desire to evaluate the possibility of implementing small scale ocean-water desalination programs at remote locations and appreciated the District's forward drive in implementing these cutting edge technologies.

MWD Director Visit

MWD Director John Morris toured West Basin's Water Recycling Plant on October 21, 2004. A presentation was made regarding the District's programs and Ocean-Water Desalination Program. Director Morris was extremely impressed with the District's facilities and progress on ocean-water desalination.

FISCAL IMPACTS:

There are additional fiscal impacts resulting from the activities discussed in this memo. Cost impacts resulting from the operation of the Pilot Plant are included in the FY 2004-05 Capital Budget, and are also partially reimbursed through grants.

ENVIRONMENTAL COMPLIANCE:

None required at this time.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on November 3, 2004 and recommended for approval at the November 22, 2004 Board meeting.

RECOMMENDED MOTIONS:

That the Board authorizes the Co-Acting General Managers to:

1. Execute a contract with the recommended contractor from El Segundo Power to perform the maintenance hole access construction to achieve a warm water connection point for a total not-to-exceed amount of \$25,000.
2. Amend the existing United Water Services contract to add \$65,000 to provide additional equipment and labor for the Warm Water Conversion Project and manage the base electrical load survey documentation at El Segundo Power.

EXHIBITS:

None.