

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ENGINEERING AND OPERATIONS COMMITTEE

July 11, 2011

Chair Evans called the meeting to order at 12:00 p.m. in Committee Room 2-145 at Metropolitan's Headquarters.

Members present: Chair Evans, Vice Chair Brown, Directors Barbre, Blake, Camacho, De Jesus, Little, Lowenthal, Montalvo, Morris, Peterson, Record, Steiner, and Wright.

Members absent: Directors Bowersox, Grunfeld, and Sanchez.

Other Board members present: Board Chairman Foley, Directors Ballin, Brick, Dick, Griset, Lewinger, Edwards and J. Murray.

Staff present: A. Arita, L. Carrillo, Y. Casillas, J. Green, G. Johnson, Kightlinger, W. Lieu, D. Man, M Mead, C. Neal, M. Parsons, G. Riss, M. Scully, L. Shraibati, M. Stewart, M. Chaudhuri, S. Arakawa, M Morel, B. Pecs, J. Lambeck, L. Waade, B. Coffey, B. Koch, B. Yamasaki, D. Clark, M. Burch, T. Campbell, and A. Garabetian.

1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

No members responded.

2. APPROVAL OF THE MINUTES OF THE ENGINEERING AND OPERATIONS COMMITTEE MEETING HELD JUNE 13, 2011

Approved

Motion: Director Blake

Seconded: Director Wright

3. CONSENT CALENDAR ITEMS – ACTION

- 7-1** Subject: Appropriate \$930,000; and authorize three rehabilitation projects at the Joseph Jensen Water Treatment Plant (Approp. 15442)
- Presented by: No presentation was requested.
- Motion: Adopt the CEQA determinations and
- a. Appropriate \$930,000;
 - b. Authorize final design of the Jensen Service Water Pump Replacement project;
 - c. Authorize preliminary design to refurbish Jensen Modules Nos. 2 and 3 flocculators; and
 - d. Authorize construction of the Jensen Basin Launder Gate Improvements.
- Motion Carried Moved: Director Morris Seconded: Director Record
-
- 7-2** Subject: Appropriate \$130,000; and authorize preliminary design to replace standby generators at the Temescal and Corona Power Plants (Approp. 15441)
- Presented by: No presentation was requested.
- Motion: Adopt the CEQA determination and
- a. Appropriate \$130,000; and
 - b. Authorize preliminary design to replace the standby generators at Temescal and Corona Power Plants.
- Motion Carried Moved: Director Morris Seconded: Director Record
-
- 7-3** Subject: Appropriate \$170,000; and authorize final design to replace the data center uninterruptable power supply at Metropolitan’s Headquarters Building (Approp. 15376)
- Presented by: No presentation was requested.
- Motion: Adopt the CEQA determination and
- a. Appropriate \$170,000; and
 - b. Authorize final design to replace the data center UPS system at Metropolitan’s Headquarters Building.
- Motion Carried Moved: Director Morris Seconded: Director Record

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

Committee Chair Evans recognized Director Morris as an honorary diplomate of the American Academy of Water Resources Engineers.

Chief Operating Officer Debra Man discussed the recent audit by the Western Electricity Coordinating Council (WECC) of Metropolitan's 230 kV Colorado River Aqueduct Power Transmission System. Ms. Man acknowledged key staff for working on the audit and added that, by having a successful audit, Metropolitan avoided fines that could have been as much as \$1 million per violation/per day. Ms. Man added that staff received formal notification with compliments from WECC on how well they received information from staff and on the impressive operations from 2007-2011.

Ms. Man recognized Unit Manager Jon Lambeck and Program Manager Ann Finley for having the hydroelectric facilities at Diamond Valley Lake reclassified as renewable energy and for renegotiating with Southern California Edison an agreement that will bring Metropolitan an additional \$2.2 million of revenue over the next four months.

Group Manager Gordon Johnson introduced Engineering Services' new group of student interns. The Engineering Student Intern Program provides an opportunity for interns to get hands-on engineering experience. Ms. Man added that there are 20 other interns in Water System Operations, located at La Verne, and that the student internship program is very important to Metropolitan.

- a. Subject: Update on Integrated Area Study and System Reliability Assessment, including the Central Pool Augmentation project

Presented by: Engineering Services Unit Manager David Clark

Following the staff report, Director Barbre asked if the proposed Riverside treatment plant would be located at Eagle Valley. Mr. Clark responded that the future Riverside plant would be located in central Riverside County. Director Barbre then inquired about water usage in the 1990s when the Central Pool Augmentation (CPA) program was originally proposed. Ms. Man said Metropolitan had not fully embraced conservation efforts and local resources at that time, so future demands in a dry year were projected to be around 2.7 MAF at that time.

Director Barbre asked how the CPA project relates to the Second Lower Cross Feeder (SLCF). Mr. Clark responded that several years ago staff initiated design of the SLCF project. However, conditions changed and another study was launched. Municipal Water District of Orange County (MWDOC) staff wanted to consider reconfiguring the project to determine if it could also provide additional local benefits. A draft report of the study was completed and MWDOC staff began to meet with local stakeholders. Metropolitan staff remains ready to complete the study and report.

Director Barbre mentioned that the ability to move water from Los Angeles to Orange County is critical and that he would like to see more value assigned to system reliability and redundancy. Ms. Man agreed that reliability is important and that, in addition to ozonation, staff has performed slope stabilization and seismic upgrades to the Diemer facility so that it can withstand seismic events. Director Blake added that southern Orange County projections show an increase in population and that the need for more water should be revisited. Director Barbre stated that staff should preserve the portal sites so that they do not get encroached upon, built, or sold. Ms. Man responded that it has been staff's practice to make sure critical right-of-ways or portal sites are preserved.

Director Morris asked what evaluations has staff performed on service connections that are dependent on a sole source of water, and if there are any agencies that are totally dependent on only one facility. He also inquired about the long-term prognosis for improving reliability for those connections. Mr. Clark responded that, for the 13 percent of Metropolitan's service connections without full back-up capability, some have partial back-up capability. The Integrated Area Study (IAS) found that each agency needed to evaluate their systems and identify options to address reliability concerns. Mr. Clark indicated that a number of agencies are planning projects to address reliability, such as San Diego implementing the Twin Oaks treatment plant and considering desalination. Ms. Man stated that Metropolitan will continue to look at how system flexibility can be improved through demand-driven projects.

With regard to the CPA project, Director Peterson inquired about studying the tunneling approach versus going around the mountain with a pipeline. Mr. Clark responded that a study was performed on alternate alignments and the tunnel was found to be the preferred option. Ms. Man added that the feasibility study shows that the tunnel would have in excess of 1,000 feet of head, and that based on the feasibility assessment and our experience with the Inland Feeder project, Metropolitan would continue to evaluate the suitability of both the tunnel and pipeline options.

Director Lewinger asked about the current on-line date for the CPA, given the 2007 and the 2010 Integrated Resource Plan (IRP) projections. Ms. Man responded that with much lower demand projections, it will be beyond 2040.

Director Dick asked whether Metropolitan has reserved the portal sites at both sides of the tunnel. Group Manager Gordon Johnson replied that although

Metropolitan does not own the properties, it does have an understanding with the owners of the Eagle Glen Golf Course on one end and with a public agency on the other end. Director Dick inquired about who the public agency was. Mr. Clark confirmed that it was the Irvine Conservancy and that the land is protected open space (Limestone Canyon Wilderness Area). Since Metropolitan participated in the Orange County Central/Coastal Natural Communities Conservation Plan, it has the ability to locate the west portal at that site.

Ms. Man reiterated that the CPA is on a long-term track, well beyond 2040, and that the timing of the Second Lower Cross Feeder project will depend on ongoing studies and discussions with MWDOC. Director Barbre inquired why staff was projecting beyond 2040, as opposed to 25 years out, which is the normal practice. Ms. Man responded that through the Integrated Area Study (IAS) staff looked at projecting beyond 25 years.

Director Barbre asked if another public agency were to construct a tunnel in a similar alignment, would that accelerate the project and would economies of scale come into play. Ms. Man responded that staff would examine this and bring timing issues back for the Board to consider. General Manager Jeff Kightlinger added that the IRP is a 25-year look ahead and on a 5-year update cycle.

b. Subject: Colorado River source water protection update

Presented by: Water System Operations Team Manager Mickey Chaudhuri

Following the staff report, Director Brick asked for clarification on the in-situ biological treatment for the Topock Chromium 6 remediation as to how the facilities are accomplishing fresh water flushing of the basin. Mr. Chaudhuri responded that there are extraction wells located along the river that help shift the hydraulic gradient upstream. A nutrient is then added along with freshwater and injected upstream of the plume to reduce the Chromium 6 to Chromium 3, which then can precipitate out in the aquifer. The freshwater flushing accelerates the process because the groundwater in that area moves rather slowly.

Director Brick inquired about the concerns of the Fort Mojave Indian Tribe over the treatment approach and fresh water flushing. Mr. Chaudhuri responded that Fort Mojave's concerns are related to cultural issues on sacred land and not directly to water quality or treatment.

Director Peterson inquired about the termination of the conveyance system that would convey treated wastewater from the Las Vegas Wash to the center of Lake Mead. Group Manager Jim Green responded that this project has been officially terminated.

Committee Chair Evans commented that the success of wastewater treatment plants in the Las Vegas area should be communicated to the Sacramento Regional Wastewater Treatment Plant. Mr. Kightlinger acknowledged that productive relationships have

been developed over the years between Metropolitan and the Las Vegas area wastewater dischargers.

- c. Subject: Update on AB 32, the California Global Warming Solutions Act of 2006

Presented by: Water System Operations Unit Manager Jon Lambeck

Following the staff update on AB 32 implementation, Director Barbre asked whether Metropolitan is pressing ahead to reclassify large hydropower as green so it can comply with the renewable power requirements. Both Ms. Man and Mr. Kightlinger confirmed Metropolitan is doing so.

- d. Subject: Update on salinity management plan

Presented by: Water System Operations Group Manager Jim Green

The presentation provided background on Metropolitan's 1999 salinity management policy objectives; historical and current salinity trends in Metropolitan's water supplies; the need for an updated salinity management plan; and recent collaborative actions to initiate an updated plan. Director Morris commented that coordination with regional salt and nutrient management plans is important.

7. MANAGEMENT REPORTS

- a. Subject: Water System Operations Manager's report

Presented by: Water System Operations Group Manager Jim Green

Mr. Green provided a brief update on discounted replenishment deliveries, stating that seven agencies are participating and that staff is managing the board-approved cap of 225,000 AF. Mr. Green also mentioned that the annual Water Quality Consumer Confidence Report will be passed out at the Board Meeting.

- b. Subject: Engineering Services Manager's report

Presented by: Engineering Services Group Manager Gordon Johnson

Mr. Johnson reported that the E&O Committee Inspection Trip, hosted by Chair Evans and Vice Chair Brown, was held on Friday, June 24, at the Weymouth plant. Work highlighted included the plant's electrical upgrades, upcoming ozonation facility, recent reliability and seismic upgrades, and an update on quagga mussels.

Mr. Johnson also noted that Metropolitan received a check from the state of California for \$13.4 million out of the total of \$20 million in Proposition 50 grant funds for the Weymouth ORP.

8. FOLLOW-UP ITEMS

- Provide an update within six months on key plant and tunnel portal sites for the Central Pool Augmentation program.
- Update the committee on the progress of the Second Lower Cross Feeder and the ongoing efforts with MWDOC and Metropolitan staff.
- Continue to support legislation that would classify hydropower as renewable energy. Progress will be provided in the Communications and Legislation Committee.
- Continue to track costs associated with AB 32 compliance.

9. FUTURE AGENDA ITEMS

None

Next meeting will be held on August 15, 2011.

Meeting adjourned at 1:20 p.m.

Tom Evans
Chair