



**MINUTES
JOINT REGULAR MEETING OF THE
ENGINEERING AND OPERATIONS COMMITTEE AND
SPECIAL MEETING OF THE BOARD OF DIRECTORS
THURSDAY, FEBRUARY 22, 2018
8:30 AM**

DIRECTORS PRESENT:

William Plummer	Committee Chairman
Carol Lee Brady	Committee Member
Bill Wilson	Committee Member
Lisa Herman	Committee Alternate
Danny Martin	Board Member
Angel Garcia	Board Member
Bennett Drake	President

STAFF PRESENT:

General Manager Jeff Armstrong, Assistant General Manager-Engineering & Operations Eva Plajzer, Assistant General Manager-CFO/Treasurer Rick Aragon, Chief Engineer Andrew Webster, Water Operations Manager Rich Ottolini, Field Services Manager Randy Crowell, Water Resources Manager Jeff Kirshberg, Construction Contracts Manager Heath McMahon, Engineering Manager-CIP & Development Jake Wiley, Water Reclamation Manager Mark Kaveney, Water Quality Supervisor Jordan Farrell, Water Systems Analyst Tony Fowler, Administrative Services Supervisor/Deputy District Secretary Denise Todd, and Senior Administrative Assistant/Recording Secretary Leslie Mayer.

Other attendees: Kurt Kettenacker/Umetech; Dawn Taffler, Paul Brown, and Paul Chau/Kennedy-Jenks Consultants (left at 10:00 AM); and Ilan Fuss/Sage Renewable Energy Consulting.

ADDITIONS TO AGENDA

There were no additions to the Agenda.

APPROVAL OF AGENDA

Chairman Plummer called for approval of the Agenda of the Regular Meeting of the

Engineering and Operations Committee of the Rancho California Water District of February 22, 2018, as presented.

MOTION: Director Wilson moved to approve the Agenda of the Regular Meeting of the Engineering and Operations Committee of the Rancho California Water District of February 22, 2018, as presented. Director Brady seconded the motion, and it carried as follows:

RESULT: **APPROVED [UNANIMOUS]**

MOVER: Bill Wilson, Committee Member

SECONDER: Carol Lee Brady, Committee Member

AYES: William Plummer, Carol Lee Brady, Bill Wilson

PUBLIC COMMENT

An opportunity was given for any person to address the Engineering and Operations Committee (Committee) upon any subject not identified on the Agenda, but within the jurisdiction of the Rancho California Water District. For items not listed on the agenda, the Brown Act imposes limitations on what the Committee may do during public comment. As to matters on the Agenda, persons will be given an opportunity to address the Committee when the matter is considered.

There was no public comment.

Item 1. Review of Project Recommendation for the Recycled Water Resources Plan

Water Resources Manager Jeff Kirshberg addressed the Engineering and Operations Committee (Committee) to provide information and seek a project recommendation for Rancho California Water District's (District) Recycled Water Resources Plan (RWRP).

Utilizing a PowerPoint presentation, Dr. Kirshberg began by reminding the Committee of staff's work thus far in formulating preliminary findings associated with the District's goal for the RWRP to compare a wide range of recycled water use alternatives, and to identify a preferred project supported with confidence by the District's Board of Directors (Board) and staff that: 1) maximizes limited resources; 2) reduces costs; 3) achieves regulatory compliance; and 4) demonstrates reliability and feasibility. Continuing, Dr. Kirshberg reviewed the outcome of two workshops held with the Board discussing both objectives/screening criteria and alternatives development. From the second workshop discussing alternatives development, staff developed a focused list of alternative projects, based upon the feedback submitted by the Board and weighing of all metrics, including a sensitivity analysis. Noting that the focus of all 16 originally considered potential projects was to increase water supply, he assured that no existing recycled water customers will be disconnected from the recycled water distribution system. He then outlined a total of five potential alternatives (short-list) that staff recommends to pursue further, as follows:

Type of Reuse	Alternative
Non-Potable Reuse (NPR)	1a - Expand Existing NPR Distribution System - No Demineralization
NPR	1b - NPR Parallel Distribution for Demineralized Supply with Raw Water - Rancho Division Service Area Only
Groundwater Replenishment Reuse Project (GRRP)	2a - Indirect Potable Reuse (IPR) - Lower VDC
GRRP	2b - IPR - Lower VDC All Supply Demineralized
GRRP	3a - IPR - Smaller Scale

Next, Dr. Kirshberg asked Dawn Taffler with Kennedy/Jenks Consultants to continue with the presentation. Ms. Taffler addressed the Committee and informed that the focus for purposes of this meeting will be to: 1) present the evaluation and project ranking for the short-list of alternatives, utilizing the defined weighted criteria from the Board; 2) receive feedback from the Board members on scoring and ranking outcomes; and 3) obtain input on a project, or phased set of projects, to move forward. She then displayed a slide with an overview map showing the locations of the before-mentioned preferred alternative projects within the District's service boundaries, and introduced one more alternative for consideration--Alternative H1, which is a hybrid alternative combining Alternative 1a (NPR expansion) with Alternative 3a (IPR smaller scale). Continuing, Ms. Taffler displayed and discussed at length additional slides that covered pertinent information discovered for the NPR preferred alternative projects, along with an update on staff's findings for outcomes and requirements to maintain status quo management of the existing recycled water distribution system.

At this time, Ms. Taffler turned the presentation over to her colleague, Paul Chau, to review the GRRP alternatives comprised of Alternatives 2a, 2b, and 3a. Similarly, Mr. Chau discussed at length additional slides that covered specific information pertaining to these alternatives.

Returning to the lectern, Ms. Taffler continued the presentation by reviewing a summary of engineers' opinion of probable costs for the various proposed NPR and GRRP alternatives, indicating that additional staffing costs and average Metropolitan Water District of Southern California Tier 1 treated water costs over the period of 2020 through 2070 have been projected in the estimation presented.

To a question posed by Chairman Plummer, Chief Engineer Andrew Webster indicated that the Joint Powers Authority (JPA) for the Santa Rosa Water Reclamation Facility (SRWRF) is conducting the rehabilitation work for Title 22 effluent requirements, which will continue into the future. For any advanced water treatment project work, the District would be responsible for any separate facilities constructed, wherein property has been set aside for that purpose through the JPA agreement and the associated costs are reflected within the subject analysis. General discussion ensued regarding projected recycled water availability from the SRWRF and Eastern Municipal Water District, public

outreach for recycled water use participation, and potential cost savings over time with some proposed projects.

Next, Ms. Taffler shared the presentation with her colleague, Paul Brown, to review two tables covering short-list screen results-ranking and sensitivity analysis and Board top ranking projects, noting that the proposed H1 alternative, NPR-IPR hybrid, scores very high overall; further, the H1 alternative maximizes the amount of water use, diversifies the customer base, and provides water quality benefits. Director Drake expressed his concern regarding the hybrid alternative, stating that the District does not want to get "locked in a corner" by not being able to expand beyond 550 acre-feet, and questioned whether or not it would be a long-term solution for the District, with potential future stranded facility(ies). Continuing, Ms. Taffler discussed two additional slides containing implementation and pricing filters used in processing/formulating the current suggested alternatives, resulting in two potential projects (1a and H1) and the status quo option still up for consideration; further, she indicated that the top ranked projects include no brine line requirement.

Lengthy general discussion ensued regarding the suggested alternatives, winter/summer demands and peak usage timeframes, construction contingency amount, and balancing of costs and benefits, with general consensus agreeing that the hybrid alternative (consisting of alternatives 1a and 3a) appears to be the most attractive project overall.

Next, Dr. Kirshberg reviewed a slide containing data concerning balancing costs and benefits with the hybrid alternative (H1): NPR expansion (Alternative 1a) with IPR smaller scale (Alternative 3a), highlighting the following points:

- Maximizes reuse without building a brine line;
- Maximizes use of existing infrastructure to offset potable demands;
- Flexibility for phasing (both NPR and IPR);
- Benefits groundwater basin (quantity and quality);
- Provides opportunity to gain experience building and operating an advanced water treatment facility;
- Stepwise approach to future potable reuse; and
- Available excess water for transfers in the future.

More general discussion ensued regarding varying aspects of the discussed alternatives; the future supply of recycled water, and aspects of the cost and implications of brine line alternatives.

Concluding the presentation, staff's next steps for the next two to three months were reviewed, including: the financial plan and rate impact will be performed by Raftellis Financial Consultants, a financial plan model will be developed for the preferred alternative project, and the rate impact will be evaluated. Further, the proposed financial plan model will be discussed in a workshop that will be scheduled to take place in May/June 2018.

MOTION: Director Wilson moved that the Engineering and Operations Committee, having reviewed the presented material regarding future recycled water use within the Rancho California Water District (District), recommend staff pursue Alternative H1 and provide an in-depth financial plan and rate analysis, as part of the Recycled Water Resources Plan (Project No. D1909). Director Brady seconded the motion, and it carried as follows:

RESULT: **APPROVED [UNANIMOUS]**

MOVER: Bill Wilson, Committee Member

SECONDER: Carol Lee Brady, Committee Member

AYES: William Plummer, Carol Lee Brady, Bill Wilson

Item 2. Performance Review of Rancho California Water District's Solar Power Projects

Assistant General Manager-Engineering and Operations Eva Plajzer addressed the Engineering and Operations Committee (Committee) to introduce this item concerning the performance of Rancho California Water District's (District) solar power projects/facilities.

Ms. Plajzer referred to the solar power facilities in use for the District: three net energy metering (NEM) facilities located at the Santa Rosa Water Reclamation Facility (SRWRF), Senga Doherty Pump Station (SDPS), and the District Headquarters Building, along with one renewable energy self-generation bill credit transfer (RES-BCT) facility located on Washington Avenue, and she indicated that this overall review period covers performance from the date of inception to current, as well as forecasted information. Ms. Plajzer then introduced the consultant tasked with compiling the performance data for these solar power projects/facilities, Ilan Fuss with Sage Renewable Energy Consulting (Sage). Mr. Fuss addressed the Committee and began the performance review utilizing a PowerPoint presentation, as provided for in the Committee meeting packet.

Mr. Fuss displayed a series of slides containing very detailed performance review information, including: project details; 2017 utility analyses; forecast versus actual annual net savings; forecast versus actual and current forecast lifecycle savings; and expected lifecycle financial returns for all previously-mentioned District facilities. Intermittent discussion occurred regarding information provided by Mr. Fuss and various queries from the Committee, including how the existing and forecasted trend for Southern California Edison (SCE) rate increases/changed fixed charges and facility equipment malfunction will drop the value of energy produced, ultimately resulting in lower energy savings for the District and all SCE customers for that matter.

To a question posed by Director Drake, Mr. Fuss advised that the existing power purchase agreements place the responsibility for the purchasing of power from SCE at their determined rates and demand charges on the District. Further, the use of battery back-up power can be utilized on the demand portion; the portion that the solar facility doesn't help offset peak demand rates.

Continuing, Mr. Fuss reported that the California Public Utility Commission is still considering SCE's request to shift the peak time of use period from 12:00 PM - 6:00 PM to 4:00 PM - 9:00 PM, which is expected to be granted, further reducing the value of energy produced; however, all existing SCE solar power customers' facilities will be grandfathered for 10 years under the current time of use periods from the time the facility was placed online.

During discussion of the Headquarters Building solar power facility, Assistant General Manager-CFO/Treasurer Rick Aragon clarified that, while the data shows a "loss," the reality is that the District is not using as much energy as staff originally factored in; thus, the higher forecasted "savings" do not reflect accordingly. Further, these figures do not reflect the energy the District is not using now (energy efficiency) and the amount of money not being spent. To a question submitted by Chairman Plummer, Ms. Plajzer indicated that recently installed energy efficient equipment has lowered the energy demand originally factored in and, further, because the District owns the solar power equipment, once the debt service ceases, the facility will continue to generate solar energy for the sole future savings benefit of the District.

Next, Mr. Fuss explained that the RES-BCT facility agreement differs from other NEM projects in that it generates electricity, exports almost all of the generated electricity to the grid, and the District receives credits to benefiting accounts, the value of which is based on time of use period for the generation portion of the energy bill, which is approximately 55 percent of the retail rate. He instructed that equipment failures during the summer months affected the anticipated/forecasted savings amount. General discussion ensued regarding the maintenance agreement with SunPower and a 95 percent performance guarantee. Mr. Fuss advised that this performance guarantee is not seasonal, and the overall system performed at approximately 95 percent of the guaranteed amount; further, the agreement contains a 5-year "true-up" term to make up for previous lower performance scenarios. Additional discussion ensued regarding what may cause the equipment to fail and the perceived slow response time from SunPower for equipment failure repair, along with any potential needed legal counsel review and properly noticing SunPower when repairs are necessary. Staff assured the Committee that the systems are monitored almost daily and that SunPower's response to repair requests is also being monitored.

Director Drake stated that he is happy District staff provided this analysis, and suggested that the sooner staff is able to react to situations, the better; further, he opined that this type of consultant work is money well spent.

More general discussion continued regarding the guaranteed performance by SunPower and whether the District needs to get more aggressive with expecting a faster response; in particular, the idea of placing pressure on SunPower through the Association of California Water Agencies' Energy Committee. Director Wilson opined that, bottom line, the District is still saving money with these projects, and Mr. Fuss agreed that these projects will still provide savings over the long-term. Director Drake asked that the "true-up" information over the next five to ten years be published for the record and for the ratepayers' information. Ms. Plajzer thanked the Committee for its

input and indicated that staff will continue to provide a performance review on an annual basis, utilizing Sage each year if possible; further, she will engage legal counsel to review the agreements. Finally, she recognized Water Systems Analyst Tony Fowler for identifying an error in rate structure used by SCE within their billing, which resulted in a savings to the District of approximately \$35,000.

Item 3. Review and Consider 5-Year Capital Improvement Plan, Proposed Fiscal Year 2018-2019 Major Capital Projects and Minor Capital Projects, and Budget for Fiscal Year 2018-2019

Due to time constraints, this item was deferred to the March 1, 2018 Finance and Audit Committee meeting.

Item 4. Project Status Reports - January/February 2018

Presented for Engineering and Operations Committee (Committee) review and acceptance were the Rancho California Water District (District) Construction Project Status Report, Outside Contracts Summary Report, and Capital Job Status Report for the months of January/February 2018.

Construction Contracts Manager Heath McMahon briefly reviewed portions of the construction project status report included in the Committee meeting packet, and entertained any questions from the Committee.

Hearing no questions, the Committee accepted the Project Status Reports for the months of January/February 2018, as presented.

Item 5. Operations Reports - January 2018

Presented for Engineering and Operations Committee (Committee) review and acceptance were the Rancho California Water District (District) Operations Reports, Regulatory Compliance Report, production charts, Vail Lake storage and elevation charts, status reports, and water sales and production statistics for the month of January 2018.

Water Operations Manager Rich Ottolini advised that a Water Quality Supervisor has been hired to replace retired staff, Randy Hagan, and entertained any questions from the Committee.

Hearing no questions, the Committee accepted the Operations Reports for the month of January 2018, as presented.

Item 6. Assistant General Manager's Report

Assistant General Manager-Engineering and Operations Eva Plajzer showed a video of an 8-inch pipeline failure that occurred recently in the Santa Rosa Division. Additionally, she briefly reported on the status of the Vail Lake Road Repair Design and Permitting Request for Proposals effort and indicated that staff is moving forward with the Federal Emergency Management Agency (FEMA) reimbursements for storm damaged facilities.

Item 7. Adjournment

There being no further business to come before the Committee, the meeting adjourned at 10:55 AM.