



**MINUTES OF THE  
SPECIAL  
WORKSHOP  
OF  
THE BOARD OF DIRECTORS  
OF  
THE INLAND EMPIRE UTILITIES AGENCY\*  
WEDNESDAY, MAY 11, 2016  
8:30 A.M.**

**DIRECTORS PRESENT:**

Michael Camacho, Vice President  
Terry Catlin, President  
Steven J. Elie, Secretary/Treasurer  
Jasmin A. Hall

**DIRECTOR ABSENT:**

Gene Koopman

**STAFF PRESENT:**

P. Joseph Grindstaff, General Manager  
Chris Berch, Executive Manager of Engineering/Assistant General Manager  
Christina Valencia, Chief Financial Officer/Assistant General Manager  
Kathy Besser, Manager of External Affairs  
Jerry Burke, Deputy Manager of Engineering  
Andy Campbell, Deputy Manager  
Javier Chagoyen-Lazaro, Manager of Finance and Accounting  
Jason Gu, Grants Officer  
Liz Hurst, Environmental Resources Planner  
Sylvie Lee, Manager of Planning & Environmental Resources  
Jason Marseilles, Senior Engineer  
Matthew Melendrez, Deputy Manager of Operations  
Jeff Noelte, Deputy Manager of Technical Services  
Jason Pivovaroff, Senior Engineer  
Shaun Stone, Manager of Engineering  
April Woodruff, Board Secretary/Office Manager

**OTHERS PRESENT:**

Jean Cihigoyenette, Cihigoyenette, Grossberg, and Clouse  
Satish Kamath, Parsons

A meeting of the Board of Directors of the Inland Empire Utilities Agency\* was held at the office of the Agency, 6075 Kimball Avenue, Bldg. A., Chino, California on the above date.

President Catlin called the meeting to order at 8:33 a.m., and he led the pledge of allegiance to the flag. A quorum was present.

President Catlin stated that members of the public may address the Board. There was no one desiring to do so.

President Catlin asked if there were any changes/additions/deletions to the agenda. There were no changes/additions/deletions to the agenda.

**1. RP-1/RP-5 EXPANSION PRELIMINARY DESIGN REPORT (PDR)**

Manager of Engineering Shaun Stone stated that the purpose of the workshop is to discuss the RP-1/RP-5 Expansion Preliminary Design Report (PDR). He stated that this is the first of a series of workshops to discuss the RP-1/RP-5 PDR stages and to keep the Board engaged in key decisions throughout the process. Mr. Stone noted that the objective of the workshop is to discuss facility capacities and the expansion sizing; RP-5 Secondary Treatment System Alternatives (conventional activated sludge process) vs. Membrane Bio-Reactors (newer technology); expansion phasing related to the three treatment plants (RP-1, Carbon Canyon, and RP-5); and impacts on the cost of budget. He reported that the workshop will focus on the following technical memorandum, facility flows and expansion phasing, decommissioning of CCWRF, and RP-5 Secondary Treatment alternatives.

Senior Engineer Jason Marseilles first discussed the facility flows and the expansion sizing. He stated that the purpose of the analysis is to provide the basis for the expansion phasing options that will later be discussed under the evaluation of the decommissioning of the Carbon Canyon and the RP-5 Secondary Treatment alternatives. Mr. Marseilles presented graphs that show future influent flows and treatment capacities of RP-1 and RP-5. He introduced Option 1 for the phased RP-5 expansion. He stated that Option 1 has a 7.5 MGD expansion in 2023, which will bring the capacity flows up to 22.5 MGD, and another expansion in 2035, which will bring the capacity flows up to 30 MGD. Mr. Marseilles presented Option 2, which will bring the capacity flows up to 30 MGD with an expansion in 2023. He further noted that in 2030, as it gets close to capacity, the Agency will have the ability to send flows to RP-1, as a redundancy.

*(Director Camacho entered the meeting room at 8:50 a.m.)*

Executive Manager of Engineering/AGM Chris Berch added that one of the things that the Agency has been really successful with the Regional Board is that they are considering our system as a whole versus individual facilities, which is unique. He stated that most times, they are looking at that 75% driving expansion at every plant. IEUA staff has said that at RP-4, for example, IEUA is planning on getting close to a 100%, but IEUA has the ability to bypass flows to RP-1. This buffer makes the Regional Board comfortable with a whole system approach. He stated that it is unique to IEUA's system, and it has allowed us to be flexible and reduce costs.

Senior Engineer Jason Marseilles provided a timeline of the Agency facility expansion phasing beginning with RP-1 in 2018, expansion of RP-5 in 2023, expansion of RP-1 in 2030, potential for RP-5 in 2035 and expansion of RP-4 in 2040.

Mr. Marseilles then addressed the evaluation of the decommissioning of CCWRF. He stated that the evaluation of the decommissioning was initiated due to the proximity of RP-5 and CCWRF, which is approximately 1.5 miles. He stated that the objective of the evaluation was to determine if the savings realized by the operating and maintaining of only one centralized facility, would offset the additional costs for the expansion of RP-5 and decommissioning of CCWRF. He reported that staff conducted a business case evaluation that reviewed three alternatives - Alternative 1 was to operate CCWRF indefinitely; Alternative 2 was to operate CCWRF until 2033; and Alternative 3 was to shutdown CCWRF after the expansion of RP-5 in 2023. He stated staff evaluated capital cost for the expansion of RP-5, R&R capital costs,

operations & maintenance costs, and any benefits that the Agency would gain from the sale of the CCWRF property and capital assets; as well as drawbacks from the loss of the facility. He reported that staff's recommendation is Alternative 1, to operate CCWRF indefinitely, due to the lowest capital costs and 30 year costs.

Director Elie commented that he is pleased that it ended up working out economically, because he is concerned about failure situations, or having separate capacity, and not putting all of our "eggs in one basket". He stated that the reality is, that the plant has been there for a very long time and with the site constraints at RP-5 and other potential uses for RP-5 that were discussed, such as food waste, he has concerns of putting everything on one site.

Mr. Marseilles moved to the next topic of discussion, which is the evaluation of the RP-5 secondary treatment alternatives. He stated that the first series of technical memos that were completed for the Preliminary Design Report had a very strong focus to the secondary treatment system. Mr. Marseilles said that the reason for this is because of the limited secondary system capacity at RP-1 and RP-5. In addition, it can account up to 50% of the total cost for a liquids treatment system, and is the reason this phase will be executed first. Mr. Marseilles reported that staff conducted a Business Case Evaluation (BCE) that reviewed three alternatives to expand the secondary treatment system - Alternative 1: Expand the existing Convention Activated Sludge (CAS) System; Alternative 2: Convert the existing CAS System to a Membrane Bio-Reactor (MBR) System and expand the MBR to meet capacity requirements; Alternative 3: Maintain the existing CAS System and construct a new MBR train for expanded capacity. He stated staff evaluated the benefits versus the drawbacks of each of the three alternatives. He pointed out that in Alternative 2 and Alternative 3, which are the MBR System options, they have a higher quality effluent than a CAS System. He stated the reason is that it is pulled through a membrane or filter that provides a higher quality effluent. He further noted that Alternative 2 has the smallest footprint, and for Alternative 2 and 3, there are benefits with the higher quality effluent for UV disinfection, and if the Agency moves forward with advance water treatment. He reviewed the BCE total project costs for each of the alternatives. He noted that Alternative 2 (converting to MBR) would provide the Agency the lowest total capital cost and the 30-year total cost in both Option 1 (two phases) and 2 (one phase). He reported that staff's recommendation is Alternative 2, Option 2.

Director Catlin inquired on the utilization of the extra capacity with the implementation of the higher expansion, particularly if the flows are lower than projected. Staff responded the flows will be rotated through the equipment to ensure that the system is online. He stated that it will give us more redundancy, that we have more equipment that we could switch to.

General Manager Grindstaff stated that we would most likely divert flows from RP-1, so the basins would not be used and that would reduce odors. This will give the Agency more flexibility when it comes time to rehab RP-1, because more flows could be diverted to RP-5.

Mr. Berch stated that there might be opportunities to build tankage and not do the mechanical equipment in certain things, just to make sure that we phase things timely, and we could bring the membranes in as they are needed in the future.

Director Elie asked staff what are the next steps.

Mr. Berch responded that staff will continue to work towards the finalization of the Technical Memos. He noted that there will be an additional 4 or 5 workshops scheduled with the Board. Staff will be presenting different topics each time, noting key decision points. He stated staff will continue to take items through the Regional Sewage Technical Committee, so the Committee members are advised and are apprised of any major decisions. Mr. Berch stated that this is an ongoing process every couple months for the next year or so.

With no further business, President Catlin adjourned the meeting at 9:15 a.m.



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Steven J. Elie, Secretary/Treasurer

**APPROVED: June 15, 2016**