# RESOURCE AND ENGINEERING PLANNING COMMITTEE MINUTES October 5, 2017

A meeting of the Resource and Engineering Planning Committee was held on Thursday, October 05, 2017 at 10:04 a.m. at the District Office, 31717 United Avenue, Pueblo, Colorado.

Chairwoman Vera Ortegon announced a quorum was present.

## **COMMITTEE MEMBERS PRESENT:**

Vera Ortegon - Chairwoman, Curtis Mitchell – Vice Chairman Seth Clayton, Greg Felt, Tom Goodwin, and James Broderick

### COMMITTEE MEMBERS ABSENT AND EXCUSED:

Gibson Hazard

## **OTHERS PRESENT:**

Jenny Bishop, Colorado Springs Utilities; Lee Miller, Garrett Markus, Leann Noga and Chris Woodka, Southeastern Colorado Water Conservancy District staff.

### **APPROVAL OF MINUTES:**

Chairwoman Vera Ortegon asked for approval of the June 1, 2017 minutes, and if there were any corrections or additions. Hearing none, Curtis Mitchell moved, seconded by Jim Broderick, to approve the minutes. Motion carried unanimously.

Chairwoman Vera Ortegon asked for approval of the September 7, 2017 minutes, and if there were any corrections or additions. Hearing none, Jim Broderick moved, seconded by Seth Clayton, to approve the minutes. Motion carried unanimously.

### **PRESENTATIONS:**

PUEBLO DAM HYDROELECTRIC PROJECT UPDATE

Kevin Meador reported that construction on the Hydro Project has begun. A graphic was provided showing the progress and purchase agreements that were signed with City of Fountain and Colorado Springs. First request from CWCB was submitted at \$4.5 million.

Following approval of the Omnibus Resolution No. 2017-02E on August 1, 2017 by the Executive Committee, the following agreements and contracts were executed:

- 1. Lease of Power Privilege (LoPP)
- 2. Colorado Parks and Wildlife Access Agreement

The completion of the above documents followed previous execution of the Colorado Water Conservation Board loan contract.

Power Purchase Agreements (PPA) with the City of Fountain and Colorado Springs Utilities have been signed by both entities and are ready for final execution by the Enterprise; however, the

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PPA with Colorado Springs Utilities is pending signature by Fort Carson. The Design and Construction and Turbine Generator Supply Contracts have been signed by Mountain States Hydro, LLC and are also ready for final execution by the Enterprise. Finally, the Memorandum of Understanding with Colorado Springs Utilities for the fiber optic cable installation is ready for final execution by Colorado Springs Utilities.

Mountain States Hydro began construction setup by trying to acquire temporary power on August 28, 2017. The Bureau of Reclamation has approved phase 1 for blasting and cofferdam work on September 26, 2017. Therefore, first blasting activity for the foundation excavation is expected to begin the first week of October. A project "groundbreaking" ceremony is tentatively scheduled for April 2018 at the site. The time will be determined in the future.

While construction is going on, additional agreements and documents will need to be prepared and negotiated which will include:

- 1. Black Hills Energy Distribution Interconnection Agreement
- 2. Black Hills Energy Electrical Transmission Agreement
- 3. Operations and Maintenance Agreements
- 4. Power Scheduling Agent Agreement
- 5. Boiler Machinery and Business Interruption Insurance Policy Purchase

The Southeastern Colorado Water Conservancy District website will have a dedicated area where project construction photos, construction meeting minutes, project schedule, and other project information will be posted on a regular basis.

The anticipated start-up for the first turbine is early June 2018. Now that construction has begun the focus will be on operation and maintenance.

### BUREAU OF RECLAMATION QUARTERLY REPORT ON INCLUSIONS

Garrett Markus reported that due to the new administrative process the quarterly reports had been delayed but are back on schedule. The remainder of the 48 parcels regarding the True Up are with the Advisory Council on Historic Preservation (ACHP). The assents that have been completed have been processed via the new process. Jenny Bishop with Colorado Springs Utilities has been working with the District to interface with the entities to process the inclusions.

### **RESTORATION OF YIELD (ROY) CAPITAL PROJECTS**

Garrett Markus reported as a result of the Six Party IGA, the ROY group was established with the purpose of recapturing water not exchanged into Pueblo Reservoir because of the minimum flow requirements of the Pueblo RICD. The ROY Group contracted with and utilizes facilities of the Holbrook Mutual Irrigation Company downstream on the Arkansas River near Rocky Ford.

The Engineering Technical Committee was established to address specific issues in the opposition of Case No. 06CW120 Exchange case late in 2014. Part of the process was to look at feasible reservoir sites as points of exchange. The ROY partners tasked their Engineering

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Technical Committee to find alternatives for site storage that were applicable and would fit ROY's basic objectives. The process was split into three phases.

Phase 1 had the group's engineering consultant, RJH Consultants, Inc., evaluate areas below the confluence of the Arkansas River and Fountain Creek for potential reservoir sites that would provide at least 5,000 acre-feet of storage and address preliminary feasibility to build these sites. From this phase, five sites were selected to move onto Phase 2.

Phase 2 developed approximate reservoir size and conceptual layout for each site. Based on that layout; potential floodplain impacts, primary permitting issues, and cost options were studied. The cost estimates were based on an AACE Class 5 estimate, which is considered less than a 2 percent design and should only be used on the concept screening level.

From Phase 2, Site PA-6N (Haynes Creek) was chosen as the most feasible reservoir site to explore. The next step included Pueblo Water executing a lease-purchase option with the owner of the site. The lease is \$150,000 per year and can extend up to five years as the ROY Group conducts onsite exploration for reservoir development. After year two of the lease, the group can purchase the property for \$2.85M.

This ultimately initiated Phase 3 of the RJH consulting work. Phase 3 employs onsite testing and exploration. The result of this phase is to get key parameters for embankment design and to see if there are any inherent fatal characteristics. A more detailed hydrological study is also being conducted for reservoir hazard issues and spillway design. This work is currently being conducted.

Onsite exploration has also instigated Phase 1 of the environment study, which has been contracted by ERO. This work is currently in process and no report is available.

From the ROY Cost Sharing Agreement that was Board approved, the Enterprise is responsible for 4.76 percent of the costs. These costs have been calculated at 5 percent for budget purposes.

### FOUNTAIN CREEK TRANSIT LOSS MODEL UPDATES

In 1988, the USGS and Colorado Springs Utilities (CS-U) completed a study to develop a method to estimate transit loss on Fountain Creek from CS-U's Las Vegas Street wastewater treatment facility through the alluvial valley along Fountain Creek downstream about 42 miles to the Arkansas River in Pueblo. The study resulted in a transit loss accounting model for quantification of Return Flows on Fountain Creek which has been in continual use since April 1989. As more entities began to have interest in utilizing their reusable Return Flows the model has been expanded to include Monument Creek.

The current model uses a FORTRAN77 computing language platform that can only be understood and manipulated by retired USGS employees. The technical committee suggested that the transit loss model be upgraded to a current language that can be manipulated by the present-day generation of USGS employees.

Model update costs were roughly half the USGS burdens and the other half was the participant's burden. Two \$50,000 Arkansas Basin Roundtable grants were secured to offset

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participant's costs and the remaining \$20,859 obligation was spread evenly between the 17 participants.

For 2018, the District will have a base cost of \$2,165, model update costs of \$1,227, and Pikes Peak Regional Water Authority membership costs of \$715 for a total of \$4,107.

## **ACTION ITEMS:**

None

## **INFORMATION ITEMS:**

None

## **OTHER BUSINESS:**

None

## **NEXT MEETING**

The next meeting will be November 2, 2017 at 10:00 a.m.

## ADJOURN

Chairwoman Ortegon adjourned the meeting at 11:11 a.m.

Respectfully submitted,

Garrett J. Markus, P.E. Water Resources Engineer