RESOURCE AND ENGINEERING PLANNING COMMITTEE MINUTES April 5, 2018

A meeting of the Resource and Engineering Planning Committee was held on Thursday, April 05, 2018 at 10:03 a.m. at the District Office, 31717 United Avenue, Pueblo, Colorado.

Chairman Mitchell announced a quorum was present.

COMMITTEE MEMBERS PRESENT:

Curtis Mitchell - Chairman, Seth Clayton - Vice-Chairman Greg Felt, Gibson Hazard, and James Broderick (via telephone)

COMMITTEE MEMBERS ABSENT AND EXCUSED:

Tom Goodwin

OTHERS PRESENT:

Gerry Knapp and Jay Winner, Lower Arkansas Valley Water Conservancy District (LAVWCD); Jenny Bishop, Colorado Springs Utilities; Alan Hamel, Andy Colosimo, and Mark Pifher, Southeastern Colorado Water Conservancy District (District) Board member; Garrett Markus, Kevin Meador, Leann Noga, and Chris Woodka, District staff.

APPROVAL OF MINUTES:

Chairman Mitchell asked for approval of the February 1, 2018 minutes, and if there were any corrections or additions. Hearing none, Jim Broderick moved, seconded by Curtis Mitchell, to approve the minutes. Motion carried unanimously.

PRESENTATIONS:

PUEBLO DAM HYDROELECTRICT PROJECT UPDATE

Kevin Meador updated the Committee with a PowerPoint showing photos of the construction progress on the Pueblo Dam Hydroelectric Project (PDHP). The exterior walls next to the river are constructed up to an elevation that is above expected high spring runoff flows that could occur in the upcoming months. The upper levels of the interior walls are being constructed to prepare for penstock tie-in and the foundation to erect the metal building for the power house. There is a scheduled shutdown of the North Outlet Works on April 16, 2018 that is pending and awaiting Bureau of Reclamation's approval. This outage is planned to tie-in the penstocks to the hydro bifurcation on North Outlet Works and is a coordinated effort between Mountain States Hydro, Colorado Springs Utilities, Pueblo West, and Bureau of Reclamation.

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SUMMARY OF UPCOMING HYDROPOWER CONTRACTS

Kevin Meador updated the Committee on upcoming PDHP contracts and agreements that will be presented for review and approval to the Committee and Board in the coming months. The following contracts will be required for the operation of the hydro facility:

- 1. **Power Scheduling Contract** The estimated daily power generation from the PDHP is committed to be provided to the power grid. This power then needs to be scheduled through an agent that coordinates with other power providers to determine the daily power supply and demand needs in the grid. The scheduling contract will be needed to provide this service.
- 2. **Operations Agreement** Although many of the PDHP's operation features will be automated, a part-time operator will still be required to do periodic checks at the powerhouse and to perform various operations on a regular basis. The operations agreement will lay out the scope of services and costs to provide these services to the PDHP. Currently, we are talking with Colorado Springs Utilities and Pueblo Water about providing this service. A recommendation will be made to the Committee and Board before a final selection is made and an agreement is prepared.
- 3. **Maintenance Contract** Scheduled maintenance will be required annually on the major equipment including the turbines and generators. These specialized maintenance activities will be contracted with a firm that does this kind of specialized work. The contract will outline the terms and conditions of providing this service to the PDHP.
- 4. Black Hills Energy Distribution Agreement The PDHP will need to connect its power transmission line to Black Hills Energy's power distribution system via the Pueblo Dam Substation. An agreement is needed to detail the terms and conditions of this connection.
- 5. **Black Hills Energy Transmission Agreement** The PDHP's generated electricity will be transmitted to its power purchasers via high voltage transmission lines owned and maintained by Black Hills Corporation. Black Hills Corporation offers electrical transmission service under a Federal Energy Regulatory Commission (FERC) Open Access Transmission Tariff (OATT). A standard transmission agreement will be required that outlines the terms and conditions of the OATT.

DEFICIT IRRIGATION

Jay Winner reported that the LAVWCD is investigating deficit irrigation. Deficit irrigation is the process of reducing the amount of water application on agricultural land to remove the differential consumptive use. Lake Isabel's need for replacement water instigated the discussion for deficit irrigation from lease-fallow perspective. However, lease-fallow requires complete dry-up of subject lands, where deficit irrigation would only limit the irrigation of lands.

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Gerry Knapp reported that the study would initially evaluate two adjacent alfalfa crops. One field would be fully irrigated, and the other field would be irrigated once or twice early in the season without destroying the crop. However, the consumptive use on the land would need to be reassessed and adjusted from the parent, lease-fallow program, that is administered by LAVWCD.

ACTION ITEMS:

None

INFORMATION ITEMS:

None

OTHER BUSINESS:

Curtis Mitchell inquired about a tour of the hydro project but due to safety and liability issues was not feasible at this time.

NEXT MEETING

Thursday, May 3, 2018 at 10:00 a.m.

ADJOURN

Chairman Mitchell adjourned the meeting at 11:02 a.m.

Respectfully submitted,

Garrett J. Markus, P.E.

Water Resources Engineer