A meeting of the Resource and Engineering Planning Committee was held on Thursday, October 3, 2019 at 10:02 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, and Andy Colosimo.

COMMITTEE MEMBERS ABSENT AND EXCUSED:
Tom Goodwin and James Broderick.

OTHERS PRESENT:
Alan Hamel, Southeastern Colorado Water Conservancy District (District) Board; Kevin Meador, Garrett Markus, Leann Noga, and Chris Woodka, District staff.

APPROVAL OF MINUTES:
Chairman Mitchell asked for approval of the August 1, 2019 minutes, and if there were any corrections or additions. Hearing none, Seth Clayton moved, second by Andy Colosimo to approve the minutes. Motion passed unanimously.

PRESENTATIONS:
JAMES W. BRODERICK HYDROPOWER PLANT UPDATE
The James W. Broderick Hydropower Plant (JWBHP) produced better than average expected generation for the month of September. Following is a summary of the total megawatt hours (MWh) for May through September 2019:

<table>
<thead>
<tr>
<th>Month</th>
<th>Scheduled (MWh)</th>
<th>Delivered (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>1,032</td>
<td>765</td>
</tr>
<tr>
<td>June</td>
<td>4,512</td>
<td>4,495</td>
</tr>
<tr>
<td>July</td>
<td>4,560</td>
<td>4,338</td>
</tr>
<tr>
<td>August</td>
<td>4,344</td>
<td>3,760</td>
</tr>
<tr>
<td>September</td>
<td>3,372</td>
<td>2,602</td>
</tr>
</tbody>
</table>

The average generation in September was 112 MWh (scheduled) and 87 MWh (delivered) per day compared to the average expected output for September of 59 MWh per day or 190 percent and 147 percent of average capacity, respectively. The following figures show the actual generation compared to the average generation for the year and the cumulative generation for the year to date.
Mountain States Hydro continues to evaluate the ground fault issue on Unit 1. The problem has been isolated to the generator and the manufacturer has been consulted regarding a resolution to the issue. Since flows decreased in September, the Unit 1 issues did not adversely impact generation. The estimated lost energy in September due to Unit 1 being out of service was 124 MWh. Unit 2 continues to generate during the Unit 1 outage. Since this is a recurring warranty issue, we are working with Mountain States Hydro and the manufacturer to be compensated for the lost generation.

Flows began above 750 cubic feet per second (cfs) at the beginning of September but dropped to 450 cfs the second week and dropped below 250 cfs the last two weeks of the month. The latter flows are more in line with average expected generation.

STORAGE STUDY

Chris Woodka reported the District has identified several methods for increasing storage within the Arkansas River basin, and understands it is the desire of the Board to develop a comprehensive program to evaluate which of the needs should be developed as part of the Capital Improvement Plan.

It is suggested that the program be broken down into projects and programs that have been identified in the last 20 years. These are outlined below:

- **Recovery of Storage**: Sedimentation in Pueblo Reservoir has reduced the available storage space by 20,000 acre-feet over the past 45 years. Additional reductions may be shown at Turquoise Reservoir and Twin Lakes, but we are awaiting results of Reclamation surveys to be certain of the amount. A Recovery of Storage program would look at methods such as dredging, enlargement, or alternative storage to regain the amount of Project Storage that has been lost.

- **Expansion of Storage**: A 1998 Needs Assessment identified the enlargement of Pueblo Reservoir as the best way to meet future M&I storage needs within the Arkansas River basin. Since 2000, nearly 100,000 acre-feet of long-term excess-capacity contracts have been issued in Pueblo Reservoir, so increasing the available storage is even more critical. Enlargement is a program within the Water Activity Enterprise.

- **Lower Basin Storage**: The District has a 4.76 percent interest in the Restoration of Yield (ROY) Program developed as a result of the six-party Intergovernmental Agreement (IGA) in 2004. The IGA protects flows from Pueblo Dam through Pueblo to Fountain Creek. The ROY program allows participants to capture forgone flows for exchange to Pueblo
Reservoir or other uses. As a participant, the District is obligated to fund its share of the ROY program.

- **Upper Basin Storage**: The Upper Arkansas Water Conservancy District is developing multi-use projects that could provide storage opportunities for the Southeastern District. These have not been fully investigated, but are included in the Business Plan.

**ACTION ITEMS:**
None

**INFORMATION ITEMS:**
SECWCD BOUNDARY REHABILITATION PROJECT
Garrett Markus updated the Committee regarding the District’s boundary rehabilitation project’s scope, hurdles, and direction. The boundaries historical decrees are well established but relating the information in the decrees to current shape files have been difficult. The project consultants, Wilson Water Group and Burns, Figa, & Will, utilized a title and abstract company to review recorded parcel information in the 1979, 1989, and 1999 decrees. Besides the obvious benefit of an accurate District boundary, this project will give a geospatial database of historic changes of the boundary in the past and placeholder for inclusions in the future.

**OTHER BUSINESS**
None

**NEXT MEETING**
Thursday, November 7, 2019 at 10:00 a.m.

**ADJOURN**
Chairman Mitchell adjourned the meeting at 11:33 a.m.

Respectfully submitted,

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