

**PROCEEDINGS OF THE CENTRAL BROWN COUNTY WATER AUTHORITY**  
**TECHNICAL COMMITTEE**

Pursuant to Section 19.84 Wis. Stats, a regular meeting of the **Central Brown County Water Authority –Technical Committee** was held on Tuesday, May 10, 2011 at the Allouez Village Offices – 1900 Libal Street, Green Bay, Wisconsin

---

**Present:** Allouez-Berndt; Bellevue-Balke DePere-Thoresen, Howard-Farr,  
Lawrence-Little, Ledgeview-Pansier

**Also**

**Present:** Dave Vaclavik, Manager  
Larry Delo – President, CBCWA  
Patrick Planton, PE –Principal Water Practice Central Leader  
Scott Beduhn, PE, Sr. Professional Engineer  
Short-Elliott-Hendrickson (SEH Inc)  
Gary Rosenbeck – McMahon, Inc.

---

The meeting was called to order by Chairman Craig Berndt at 1:30 p.m.

**ROLL CALL:**

Call the roll for attendance. Roll Call as noted above.

**APPROVAL OF AGENDA:**

Approve Agenda

**Motion made by DePere and seconded by Ledgeview to approve the agenda.**

**MOTION APPROVED UNANIMOUSLY**

**APPROVAL OF MINUTES:**

March 8, 2011

**Motion made by Lawrence and seconded by Howard to approve the minutes.**

**MOTION APPROVED UNANIMOUSLY**

**APPEARANCES:**

1. None

**COMMUNICATIONS:**

1. None

**AGENDA ITEMS:**

1. **Preparation for Interviews:**
  - a. **Interview with SEH regarding Proposal for Optimization Planning – 1:45 p.m.**

Patrick Planton, Water Practice Center Leader, and Scott Beduhn, Sr. Professional Engineer from S.E.H. (Short Elliott Hendrickson Inc) made a

power point presentation to the Technical Committee regarding their proposal for optimization planning.

They addressed the following in relation to several questions which were given to them prior to the presentation:

Recommendations/CIP related to flow rates

- Local storage and system interconnections
- Transfer stations and local storage designed for 20 year demand projections

Cost Sharing

- Improvements to member systems for individual operating efficiency with optimization not shared
- Improvements to member systems for CBCWA operating efficiency

Evaluate Operational Changes vs. CIP Expenditures

- Financial decisions with operational cost benefits
- Operational changes – annual cost savings
- CIP Projects – present cost with annual O&M and financing expenses
- Payback analysis – simplistic
- Net present value

Contractual limitations of peak hour rate max of 1.8 times average day

- Without additional system or member storage – reduction of peak hour demand will be difficult
- Individual member peak saving options will need to be explored for max day 1.8 limitations

Also addressed was the rate of MPU in meeting objectives; what might operating protocols look like; operations requirements; proposed schedule; along with expectations of CBCWA and members.

Mr. Beduhn indicated that challenges that S.E.H. foresees include the history of problems and concerns since the inception of the CBCWA concept in 2003; limited evaluation of member systems; operating protocols for member systems; and political considerations.

Included in the water system evaluation and system optimization scope are a hydraulic surge analysis, air relief valve evaluation, system pressure optimization recommendations, future system demands by member communities, and a projection of need and construction timeline for future Cooperstown booster pump station. In addition are questions related to use of local storage, future CBCWA system storage analysis, transmission system capacity evaluation, member well systems evaluation, interconnects between members, and a need to develop recommendations to improve operating efficiency, and safety or economic viability of the CBCWA system.

Mr. Planton indicated that in order to identify the least cost alternatives, S.E.H. would create a linear programming model of the entire system. A cost function equation can be developed and operating constraints identified. This detailed model will combine individual member hydraulic models with a CBCWA model through the use of available GIS mapping data. He indicated the modeling effort is needed as pressurized looped piping networks are difficult to analyze and comparisons can be made with numerous competing alternatives.

A successful project will include a capital improvement program for individual members, improvements based on identified flow parameters, along with other recommendations designed to improve operating efficiency, safety, or economic viability.

Mr. Planton explained that S.E.H. was established in 1927 and have 30 national offices.

b. **Interview with McMahon, Inc. regarding Proposal for Optimization Planning – 2:45 p.m.**

Gary Rosenbeck of McMahon Inc was also given a list of questions beforehand related to his proposal and the project. His presentation contained the following outline:

Study Focus/Project Driver

- Potential energy savings from MPU
- Delayed construction of Cooperstown pump stations

Modeled Scenarios

- Optimize operation of existing facilities
- Optimize operation of existing facilities with additional storage in member systems, i.e. individual members, consolidated
- Optimized operation of existing facilities with CBCWA centralized storage

Rosenbeck addressed cost allocation options including capital costs and operational costs, project deliverables, and additional work scope to include back-up supply planning, and hydraulic issues at pressure reducing valve stations. He presented a proposed transmission system schematic, along with a recommended plan for storage.

Rosenbeck recommended a less detailed model than that proposed by S.E.H., indicating that the system will change as time progresses.

Because of time constraints, further discussion or a decision by the committee was moved to the May 17<sup>th</sup> meeting of this committee.

**OLD BUSINESS:**

1. None

**NEXT MEETING:**

1. **Agenda Items for June 7 Meeting:**

**Adjourn:**

**Motion made by DePere and seconded by Allouez to adjourn at 4:35 p.m.**

**MOTION APPROVED UNANIMOUSLY**

Respectfully submitted,

Rae G. Knippel,  
Recording Secretary