



998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD AGENDA

Regular Board of Commissioners' Meeting October 17, 2007

Call to Order

Pledge of Allegiance

Additions to the Agenda

Commissioners' Comments

Public Comment

Approval of Minutes of September 19, 2007

I. Information

1. Financial Report
2. Administration Report
3. Operations and Maintenance Report
4. Engineering Report

II. Discussion and Possible Action

1. Emergency Generator Committee Update (Discussion)
2. Transmission PER Update (Discussion)
3. Legal Opinion Re: Transmission Obligations of Future Capacity Exchanges (Discussion)
4. Approve Contract for Raw Water Pump Electrical Duct Bank (Action)

III. Adjournment

NOTES:

The Chairman would like to have a meeting with the Executive Committee at 9:00 am on October 17, 2007 prior to the regular Board meeting.

The Board meeting will be held in the new Anderson Regional Joint Water System Headquarters building located at the 998 Hunters Trail (WTP).

Following adjournment, Commissioners and Managers are invited to join staff in a luncheon and a tour of the new Headquarters facility and the MIOX disinfectant generation system.



Your Community-Owned and Operated System
998 Hunters Trail
Anderson, SC 29625

**MINUTES OF THE
ANDERSON REGIONAL JOINT WATER SYSTEM
September 19, 2007**

LET THE MINUTES SHOW THAT THE MEDIA WERE NOTIFIED OF THIS MEETING IN ACCORDANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT.

COMMISSIONERS PRESENT: Charlie Gibson, Sandy Springs; Rick Cotton, City of Clemson; Richard Bork, Town of Pendleton; Norb Steeber, Powdersville; Douglas Locke, Broadway; Toddy Hopkins, West Anderson; Marshall Kowalski, Hammond; Tim Hood, Town of Williamson; Duane Rogers, Big Creek; David Davis, Belton-Honea Path; Phillip Mishoe, Town of Central; Leo Treadaway, Starr-Iva; Jeff Caldwell, City of Anderson

ABSENT: Homeland Park

OTHERS PRESENT: Dyke Spencer, Powdersville; Bud Whelchel, Sandy Springs; Tommy Phillips, Broadway; Eddie Makison, ARJWS; Chris Eleazer, City of Anderson; Jerry Cox, Broadway; Connie Finger, ARJWS; David Melton, ARJWS; Ann Gates, ARJWS; Scott Willett, ARJWS; Phil Parkins, CDM; Steve Wilson, West Anderson; Belton Zeigler, Haynsworth Sinkler & Boyd

Chairman Norb Steeber called the meeting of Anderson Regional Joint Water System to order at 10:00 a.m. on September 19, 2007.

Chairman Steeber opened the meeting with the Pledge of Allegiance.

Additions to the agenda were under Information:

Status of the Emergency Generator

Also handed out was an updated ARJWS contact list and a revised Administration Report.

Richard Bork stated under Commissioners' Comments that The Town of Pendleton had responded to the State's increased drought status.

There was no public comment.

Duane Rogers made a motion and Jeff Caldwell seconded to approve the minutes of the August 15, 2007 meeting. Motion carried.

I. Information

1. Financial Report

A copy of this report is attached to the file copy of these minutes.

2. Administration Report

The revised Administration Report had a misprint in the August invoices that will be corrected. The corrected report will be placed on the ARJWS website. A copy of this report is attached to the file copy of these minutes.

3. Operations and Maintenance Report

There were no questions or comments on the O & M Report. A copy of this report is attached to the file copy of these minutes.

4. Engineering Report

The chiller has been reinstalled and the MIOX system seems to be running well. After requesting the Permit to Operate from DHEC and approval, a date will be determined for converting from chlorine gas to MIOX for disinfection.

The Administrative/Maintenance building is proceeding on schedule and the duct bank work has begun.

Five bids were received on September 17th for the duct bank to the raw water pump station. Jennifer Barrington, ARJWS engineer, is reviewing the bids.

At this time Rick Cotton and Jeff Caldwell voiced their concerns over the transmission line upgrade.

A copy of this report is attached to the file copy of these minutes.

Chairman Steeber briefly discussed the Status of the Emergency Generator. A committee has been formed to make recommendations for the operation of the system. Members of this committee are Tommy Phillips, Chairman; David Davis, Jeff Caldwell, Chuck Cortez and Jennifer Barrington. The committee should have a preliminary report to present at the October meeting.

II. Discussion and Possible Action

1. Approve Parking Lot Repaving Contract

Bids were received from two providers, Ashmore Brothers and King Asphalt. King Asphalt had a bid of \$35,275 and it was recommended to authorize the Executive Director to execute an agreement with King Asphalt to provide the desired services at a cost not to exceed \$38,800 (est. cost plus 10% material contingency).

Mr. Cotton made a motion and Marshall Kowalski seconded to authorize the Executive Director to execute an agreement with King Asphalt at a cost not to exceed \$38,800.

Motion carried.

A copy of this report is attached to the file copy of these minutes.

2. Approve Front Gate Improvements

Invitations to bid were issued in July. Two providers submitted bids, Advanced Fence Systems and Pro-Line Fence. Advanced Fence Systems submitted a bid of \$18,936 and Pro-Line Fence had a bid of \$23,390. It was recommended to authorize the Executive Director to execute an agreement with Advanced Fence Systems to provide the desired services at a cost not to exceed \$20,800 (est. cost plus 10% contingency).

Charlie Gibson made a motion and Douglas Locke seconded to authorize the Executive Director to execute an agreement with Advance Fence Systems at a cost not to exceed \$20,800. Motion carried.

A copy of this report is attached to the file copy of these minutes.

Chairman Steeber reminded the Board of the dates of the next three meetings in 2007. The meetings in November and December are relatively close to the holidays and Chairman Steeber wanted to know if there would be any problems. The dates were approved.

Chairman Steeber reminded the Board that the Executive Director's review was due. The forms will be mailed to each Board member and should be returned by the middle of October.

III. Adjournment

With no further business, Toddy Hopkins made a motion and Mr. Cotton seconded to adjourn the meeting at 11:04 a.m. Motion carried.

Respectfully submitted,

Duane Rogers
Big Creek Water



998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

October 4, 2007

Subject

September 2007 Financial Report

Discussion

The attached tables identify September spending, encumbrances and deposits to the Pumped Repair and Replacement Account and the System Repair and Replacement Account. At the end of September, the Pumped R&R Account had an available balance of \$308,367.02 net of encumbrances. The System R&R Account had an available balance of \$541,649.12 net of encumbrances. The System R&R balance does not reflect a forthcoming reimbursement of \$251,821 under the SRF loan nor \$116,872 final ARC grant disbursement. The Operating Fund had a balance of \$483,771.03. System reserves of \$200,000 are invested in secured notes. Total unrestricted cash available is \$1,737,323.45 corresponding to 92.5 days of cash based on the adopted Budget.

	Balance (8/31/2007)	Balance (9/30/2007)
Pumped R&R	\$300,562.99	\$308,367.02
System R&R	\$575,661.98	\$541,649.12
Operating Fund	\$483,771.03	\$487,307.31
Rate Stabilization fund	\$200,000.00	\$200,000.00
Reserves	\$200,000.00	\$200,000.00
TOTAL Cash	\$1,759,996.00	\$1,737,323.45
FY 2007 -08 Budget	\$6,854,183.00	\$6,854,183.00
Days of Cash	93.7	92.52

A review of the September Profit and Loss Statement shows that actual expenses were under budget projections for the month by \$42,470 due primarily to cyclical wage expenses and Utility costs. Net revenue generation was under budget by \$72,787 primarily due to a one-time credit for an invoicing calculation error on Seasonal Surplus sales for CY 2007.

Approved by: Scott Willett, Executive Director

Attachments: Pumped Repair and Replacement Account Summary
 System Repair and Replacement Account Summary
 Profit and Loss Budget vs. Actual

PUMPED REPAIR & REPLACEMENT ACCOUNT

September 30, 2007

<u>DATE</u>	<u>PAYEE</u>	<u>DEPOSIT</u>	<u>AMOUNT</u>	<u>BALANCE</u>
09/01/07	BALANCE BROUGHT FORWARD			300,562.99
09/24/07	DEPOSIT (transfer from O & M)	6,799.33		307,362.32
09/28/07	DEPOSIT (interest)	1,004.70		308,367.02
	LESS EMCUMBERED FUNDS			<u>-</u>
	BALANCE UNEMCUMBERED FUNDS			308,367.02

SYSTEMS REPAIR & REPLACEMENT ACCOUNT

September 30, 2007

<u>DATE</u>	<u>PAYEE</u>	<u>DEPOSIT</u>	<u>AMOUNT</u>	<u>BALANCE</u>
09/01/07	BALANCE BROUGHT FORWARD			1,307,779.70
09/04/07	PRIMELINE COMMUNICATIONS		6,585.41	1,301,194.29
09/04/07	BUNNELL-LAMMONS ENGINEERING		898.75	1,300,295.54
09/10/07	LAZER CONSTRUCTION CO		118,390.50	1,181,905.04
09/17/07	UTILITY SERVICE CO, INC		67,561.92	1,114,343.12
09/17/07	LAKESIDE SHEET & STRUCTURAL		191.40	1,114,151.72
09/17/07	DEPOSIT (REFUND FOR OVERPAYMENT)	30.00		1,114,181.72
09/20/07	DEPOSIT (CD'S INTEREST)	5,949.72		1,120,131.44
09/24/07	HENRY BARRETT PLUMBING		4,185.00	1,115,946.44
09/24/07	TRANSFER (O & M)	100,303.81		1,216,250.25
09/28/07	DEPOSIT (INTEREST)	4,087.40		1,220,337.65
	LESS ENCUMBERED FUNDS			<u>572,502.60</u>
	BALANCE UNENCUMBERED FUNDS			<u>541,649.12</u>

SUMMARY OF SEPTEMBER SPENDING

NEW OFFICE BUILDING	119,289.25
ELECTRICAL SERVICE TO RAW WTR PUMPS/TASK #6	191.40
MISC. R&R	78,332.33
TOTAL	<u>197,812.98</u>

ENCUMBERENCES

NEW OFFICE BUILDING	788,629.00	<u>BALANCE</u>	443,824.55
RAW WATER PUMP	124,350.00		80,958.68
CELLO METERS	83,500.00		1,791.52
PER ON CORE IMPROVEMENTS	68,715.00		47,413.35
HYDRAULIC MODELING	38,500.00		(1,485.50)
			<u>572,502.60</u>

SRF LOAN FUNDING:

PLANT EXPANSION/UPGRADE PROJECT:

	BUDGET	AMOUNT	
	4,865,174.00	WITHDRAWN	
JJ&G TASK #11 Plant expansion	248,000.00	248,000.00	-
JJ&G TASK #12 Bidding phase/plant expansion	15,500.00	15,500.00	-
JJ&G TASK #13 Construction Adm/Plant Expansion	184,000.00	174,430.00	9,570.00
On-Site Chlorine Generation/Feasibility Study	7,500.00	6,814.04	685.96
On-Site Chlorine Generation/Design	93,750.00	91,533.49	2,216.51
CONSTRUCTION ENGINEERING (Guthrie Engineering)	87,600.00	88,138.09	(538.09)
CONSTRUCTION(Plant Expansion)	4,446,102.00	<u>4,885,249.99</u>	(439,147.99)

ANDERSON REGIONAL JOINT WATER SYSTEM
Profit & Loss Budget vs. Actual
 July through September 2007

	Month		Year to Date		Budget Forecast	
	Sep 07	Budget	Jul 07 - Sep 07	Budget	3+9	Budget
Ordinary Income/Expense						
Income						
6000 · FEES O & M + CAP						
6001 · FEES O & M -TOTAL						
6001.1 · Base O & M Subtotal	0.00	229,924.25				
6001.2 · Pumped O & M Subtotal	0.00	18,056.58				
Total 6001 · FEES O & M -TOTAL	0.00	247,980.83				
6002 · FEES CAP	0.00	318,531.92				
6000 · FEES O & M + CAP - Other	493,725.32					
Total 6000 · FEES O & M + CAP	493,725.32	566,512.75	1,719,500.00	1,699,538.25	6,818,114.75	6,798,153.00
6010 · FEES- MISC. INCOME	4,460.00	3,750.00	12,293.00	11,250.00	46,043.00	45,000.00
6015 · TRANSFERS FROM RSF	0.00	-16,666.67	0.00	-50,000.01	200,000.04	200,000.04
Total Income	498,185.32	553,596.08	1,731,793.00	1,660,788.24	7,064,157.79	7,043,153.04
Expense						
8010 · SALES TAX ACCRUAL	0.00	258.33	668.45	775.00	2,993.42	3,099.96
8050 · ADVERTISING -	0.00	208.33	263.22	625.00	2,138.19	2,499.96
8060 · OFFICE SUPPLIES/EXPENSES	1,703.34	708.32	3,839.01	2,124.99	10,213.89	8,499.84
8065 · DUES/SUBSCRIPTIONS	616.94	616.67	1,007.89	1,850.00	6,557.92	7,400.04
8070 · BANK SERVICE CHARGES	0.00	50.00	-1,192.81	150.00	-742.81	600.00
8080 · DEBT SVC 2002 Bond Series	310,827.08	310,027.08	981,451.87	930,081.25	3,771,695.59	3,720,324.96
8081 · DEBT SVC 2005 Bond Series	27,105.88	27,105.84	81,317.64	81,317.50	325,270.20	325,270.08
8090 · AUTO/TRUCK EXPENSE	2,003.14	2,166.66	6,992.25	6,500.00	26,492.19	25,999.92
8105 · RENT	0.00	333.34	469.49	1,000.01	3,469.55	4,000.08
8110 · LICENSES/PERMITS	84.00	84.83	2,054.00	2,736.50	2,817.47	1,017.96
8120 · Lease/Purchase Miox Gen. Equip	0.00	7,336.00	20,948.18	22,008.00	86,972.18	88,032.00
8130 · STATIONARY/PUBLICATIONS	0.00	25.00	0.00	75.00	225.00	300.00
8140 · SEMINARS & CONVENTIONS	570.00	450.00	700.00	1,350.00	4,750.00	5,400.00
8150 · POSTAGE/FREIGHT	293.97	200.00	875.14	600.00	2,675.14	2,400.00
8160 · FILM & PROCESSING	0.00	8.34	0.00	25.00	75.06	100.08
8175 · METER REPAIR	0.00	1,008.34	0.00	3,025.00	9,075.06	12,100.08
8180 · SECURITY	0.00	483.33	0.00	1,450.01	4,349.97	5,799.96
8200 · PUMP MAINT./REPAIR	910.76	3,225.00	7,987.37	9,675.03	37,012.37	38,700.00
8220 · PROFESSIONAL FEES	23,661.78	5,791.66	45,521.70	17,374.97	97,646.64	69,499.92
8300 · INSURANCE	2,332.98	7,562.08	9,963.21	22,686.24	78,021.93	90,744.96
8400 · LABORATORY	2,277.95	4,341.67	9,224.50	13,025.01	48,299.53	52,100.04
8500 · WATER TREATMENT	2,698.75	3,408.34	17,347.22	10,225.01	48,022.28	40,900.08
8600 · PAYROLL EXPENSES	85,882.21	100,962.99	269,550.84	302,889.00	1,178,217.75	1,211,555.88
8700 · TELEPHONE	2,288.26	3,466.66	7,057.88	10,399.99	38,257.82	41,599.92
8800 · MISCELLANEOUS	2,657.19	1,333.33	7,216.19	3,999.99	19,216.16	15,999.96
8820 · CUSTODIAL CARE	98.02	537.50	1,404.35	1,612.50	6,241.85	6,450.00
8830 · REPAIRS/MAINTENANCE	3,094.39	3,400.00	16,148.38	10,200.00	46,748.38	40,800.00
8840 · CHEMICAL SUPPLIES	30,524.67	26,500.00	97,352.58	79,499.99	335,852.58	318,000.00
8850 · TANKS/STANDPIPES/RESEVOIRS	6,194.45	433.34	4,827.64	1,300.01	8,727.70	5,200.08
860 · UTILITIES	35,540.25	70,458.33	286,410.67	211,374.99	920,535.64	845,499.96
8870 · TRAVEL	0.00	300.00	947.86	900.00	3,647.86	3,600.00
8871 · MANAGER'S EXPENSE	-8.70	100.00	472.48	300.00	1,372.48	1,200.00
8872 · BOARD EXPENSE	0.00	150.00	195.02	450.00	1,545.02	1,800.00
8873 · STAFF INCENTIVE PROGRAM	0.00	50.00	0.00	150.00	450.00	600.00
8874 · TRAINING & EDUCATION REIMBURSE	0.00	683.34	0.00	2,050.01	6,150.06	8,200.08
8875 · MEALS/ENTERTAINMENT	130.67	183.33	251.84	550.00	1,901.81	2,199.96
Total Expense	541,487.98	583,957.98	1,881,274.06	1,754,356.00	7,136,896.88	7,007,495.76
Net Ordinary Income	-43,302.66	-30,361.90	-149,481.06	-93,567.76	-72,738.09	35,657.28



ANDERSON REGIONAL

JOINT WATER SYSTEM

998 Hunters Trail
Phone: 864-332-6534

Anderson, SC 29625
Fax: 864-224-6116

BOARD MEMORANDUM

October 4, 2007

Subject

September Administration Report

Discussion

Billing

All payments for the month of August have been received. Meters were read on October 1st, with usage down approximately 12% from last month (for the same number of days), and up approximately 22% from the same period/same number of days last year. September bills were mailed on October 3rd.

AGENCY	PREV. YR/SAME MONTH	LAST MONTH	CURRENT
# of Billing Days	33	30	32
Anderson	182,542,870	183,765,828	197,895,757
Big Creek	30,130,000	37,400,000	29,700,000
Broadway	22,820,000	28,127,800	26,920,000
Clemson	37,300,000	70,200,000	71,000,000
Clemson Univ	40,320,000	46,200,000	50,300,000
Hammond	61,600,000	100,200,000	81,000,000
Homeland Park	19,576,000	22,351,000	21,021,000
Pendleton	11,980,000	13,740,000	13,470,000
Powdersville	20,270,000	31,670,000	26,880,000
Sandy Springs	60,349,000	80,070,000	72,696,000
Starr-Iva	41,100,000	40,500,000	37,800,000
West Anderson	45,411,000	61,467,000	51,474,000
Williamston	27,170,000	30,200,000	29,800,000
TOTALS:	600,568,870	745,891,628	709,956,757

Seasonal surplus charges for September were 14,936,000 gallons; \$9,968.64. Gallons-to-date now total 143,047,000 and total dollars \$167,072.76. All Seasonal Surplus purchasers for CY 2007 received a credit on the September invoice to correct an invoicing calculation error.

Training

The next safety/training meeting will be held October 25th at 10:00 am. This training session will be on Fall Protection and will last 1½ to 2 hours. Dave Finger, Safety & Environmental Health Coordinator from Clemson University will be the instructor.

Outreach

Bryan Bates conducted a plant tour for six (6) students and two (2) professors from Clemson University. Jennifer Barrington and David Melton made a presentation at the 20th Annual Water Environment Association of SC (WEASC) Operators Conference in Myrtle Beach. Scott Willett met with a reporter from the Anderson Journal to provide wide ranging background information on water resources in the region.

Prepared by: Connie Finger, Business Manager
Approved by: Scott Willett, Executive Director



ANDERSON REGIONAL

JOINT WATER SYSTEM

998 Hunters Trail Anderson, SC 29625
 Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

October 4, 2007

Subject

September 2007 Operations and Maintenance Report

Discussion

As of October 1, 2007 Lake Hartwell was at 652.07 ft above mean sea level. This is 7.93 feet below full pool. Raw water is being taken from the second gate of the intake structure. Water temperature at the second gate is eighty two degrees. Warmer water temperatures work well with our process in respect to settled water turbidity goals. ARJWS reached 100% settled water turbidity goal for the month of September.

Water Production Data

	Average	Minimum	Maximum	Total
Raw Water (MG)	24,062,000	19,920,000	29,071,000	721,852,000
Finished Water (MG)	22,804,000	18,012,000	25,881,000	684,117,000
Finished Max Capacity	71.30%	56.30%	81.00%	71.13%

NOTE: Percentages are finished water capacities.

Water quality remains generally good. Raw water turbidity is normal. Raw water, settled water, and finished water pH levels are normal. The maximum day for September was 81.0% of finished water capacity.

Water Quality Data

	Raw	Settled	Finished
pH	6.96	6.44	7.29
Turbidity (NTU) Range	1.7 to 3.9	0.45 to 0.89	0.05 to 0.08
Turbidity (NTU) Average	2.23	0.58	0.06
Turbidity (NTU) Exceedance	N/A	0%	0%
Residual Disinfectant (ppm)	N/A	0.58	1.29

NOTE: Area Wide Optimization Program Goal equals 1.0 NTU or less for settled water turbidity 95% of the time. Regulations require 1.0 NTU or less for finished water.

In addition to quality sampling for the Lake Hartwell Water Treatment Plant, Joint Water System staff processed 184 total coliform samples for local entities.

ARJWS has completed sixteen months of Long Term 2 Enhanced Surface Water Treatment Rule testing. Results for the sixteenth month are negative for Cryptosporidium and Giardia. The Long Term 2 testing period will encompass twenty four months.

Weather Data

	Minimum	Maximum	Total
Rainfall	0.00	1.68in.	1.70 in.
Temperature	55 ° F	95 ° F	N/A
Relative Humidity	22%	100%	N/A

Operations staff continues to optimize energy consumption at the Water Treatment Plant. Since the initiative began in March 2007, the percentage of energy consumed on-peak has dropped from a six month average (March – August) of 24.0% to 15.9% of total energy consumed. The reduction in on-peak energy consumption, coupled with avoidance of peak demand related changes have allowed the Joint Water System staff to reduce the energy cost to produce 1 million gallons of water from \$106.74 to \$84.71, a 20.6% reduction in cost all while producing 5.5% more water. Duke Energy has received permission to increase its fuel adjustment charge which will result in approximately 1% increase in energy costs, effective October 1. Monthly energy consumption is detailed below.

Power Consumption

Month	On Peak Kw	Off Peak Kw	Total Kw	Finished Water Mg	Kw Cost per Mg
Mar 2006	254,000	815,200	1,069,200	489,902,000	\$99.07
April 2006	242,000	822,800	1,064,800	527,595,000	\$90.49
May 2006	309,600	988,400	1,298,000	594,180,000	\$115.99
June 2006	368,000	1,390,400	1,390,400	662,386,000	\$120.72
July 2006	331,600	1,100,400	1,432,000	715,772,000	\$112.95
Aug 2006	323,200	907,600	1,230,800	683,980,000	\$101.22
Sept 2006	282,400	866,400	1,148,800	545,552,000	\$95.92
Oct 2006	226,800	786,400	1,013,200	578,078,000	\$78.01
Nov 2006	242,400	744,400	986,800	498,257,000	\$92.09
Dec 2006	198,400	721,600	920,000	481,292,000	\$87.71
Jan 2007	223,600	858,000	1,091,600	493,178,000	\$101.97
Feb 2007	194,400	751,600	946,000	423,803,000	\$100.48
Mar 2007	210,800	890,800	1,101,600	530,280,000	\$75.15
April 2007	191,600	1,001,600	1,793,200	555,513,000	\$75.90
May 2007	238,400	1,138,000	1,376,400	682,561,000	\$82.78
June 2007	236,800	979,200	1,216,000	644,839,000	\$87.41
July 2007	224,000	1,187,200	1,411,200	777,256,000	\$91.16
Aug 2007	226,800	1,717,200	1,438,000	684,117,000	\$95.83

Maintenance

- A tripped surge protector caused problems with control circuits on the Clemson reservoir and the tank emptied. The failed signal defaulted to full level indication on the computer and the valve closed. Plans are to have MR Systems program a pressure indication on the operator's screen with alarms if the level falls below a certain level.
- A broken refrigeration line on the plant HVAC has been repaired.
- Main cable and control wiring has been pulled for raw water pumps 4 & 5. Mounting frames have been fabricated in house for the new control boxes.
- Water service and irrigation taps have been completed for the new building.
- Conduit for backup power and communications for the new administration building has been installed across the roadway to the plant.
- Modifications to filter brackets on the MIOX system have been completed.
- Plans are underway to run a new conduit system for phone lines to the plant and new admin building. New electric and control lines for the entrance gate will be installed at the same time.
- A new drain field has been installed on the septic system. The old lines had failed completely.
- A replacement blower for one of the variable speed drives at Highview has been purchased and will be installed as soon as possible.
- CBS pump #1 is scheduled to be removed and sent to Hydro South for rebuild. This should take place the second week in October.

Prepared by: Eddie Makison, Maintenance Manager
David Melton, WTP Superintendent

Approved by: Scott Willett, Executive Director



998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

October 4, 2007

Subject

September Engineering Update

Discussion

Lake Hartwell Water Treatment Plant Upgrade

DHEC issued a Permit to Operate on September 14, 2007 for the MIOX system. After experiencing multiple faults on a three generators, MIOX was contacted on September 26th and arrived onsite September 27th. MIOX remained onsite for two days and addressed all of the faults/issues we have been experiencing.

Transmission System Improvements

Staff met with Design South on September 13th to discuss the findings of the PER.

Annual Maintenance on Storage Tanks

AT&T, Clemson University, and ARJWS met onsite at the Clemson House Tank September 12th to discuss scheduling the tank maintenance. AT&T antennas will be removed by May 15, 2008 and work will occur summer 2008.

Administrative/Maintenance Building

Various interior finishing work is currently underway. The duct bank work is complete. Duke Power turned power on in the building October 1, 2007. The contractor plans to request a Certificate of Occupancy from Anderson County by October 10, 2007.

Power to Raw Water Pumps #4 and #5

The conduit and wiring have been installed for raw water pumps #4 and #5. Testing and instrumentation is expected to occur in the next few weeks. After work is complete, we will test the pump and request a permit to operate from DHEC.

Underground Power to Raw Water Pump Station

ARJWS received five bids for the duct bank to the raw water pump station.

Prepared by: Jennifer H. Barrington, P.E., System Engineer

Approved by: Scott Willett, Executive Director



ANDERSON REGIONAL

JOINT WATER SYSTEM

998 Hunters Trail Anderson, SC 29625
Phone: 864-332-6534 Fax: 864-224-6116

BOARD MEMORANDUM

October 4, 2007

Subject

Duct bank to raw water pump station.

Recommendation

Authorize the Executive Director to execute a contract with Huntington & Guerry of Greenville, SC to replace the overhead power and communication lines with underground duct bank for an amount not to exceed \$322,000.00. Request deductive change order for tie-in work completed under first 300 ft of duct bank, duct bank across the road completed by ARJWS staff, and smaller manholes in lieu of the size originally specified.

Alternatives:

1. Re-bid with reduced scope.
2. Defer replacement of the overhead power to raw water pump station.

Fiscal Impact

Funds were budgeted and are available in the System Repair and Replacement account for replacement of the overhead power and communication lines.

Background

The existing power poles and lines have been in operation since 1968 and are in need of replacement. Several of the utility poles are rotten and all are vulnerable to ice storms or wind storms. Five bids were received as outlined below. The bids include removing the existing overhead utility poles and lines and installing underground duct bank.

Plan holders	Bid Amount Item No. 1	Bid Alternate No. 1	Total
Huntington & Guerry	\$299,000	\$23,000	\$322,000
Utility Electric LLC	\$365,000	\$16,500	\$381,500
Delta Electrical Contractors	\$411,615	\$27,865	\$439,480
Hill Electric	\$428,800	\$25,400	\$454,200
Ivey Electric	\$475,972	\$18,990	\$494,962

Bid Amount Item No. 1 – All costs for installation of power and communication duct bank. Includes cost for underground power installation.

Bid Alternate No. 1 – Removal and disposal of overhead utility lines and poles. Install underground fiber optic cable.

Prepared by: Jennifer H. Barrington, P.E., System Engineer
Approved by: Scott Willett, Executive Director