

## **DuPage Water Commission**

600 E. Butterfield Road, Elmhurst, IL 60126-4642 (630)834-0100 Fax: (630)834-0120

#### AGENDA ENGINEERING & CONSTRUCTION COMMITTEE THURSDAY, OCTOBER 20, 2011 6:30 P.M.

#### COMMITTEE MEMBERS

D. Loftus, Chair R. Furstenau F. Saverino M. Scheck

#### 600 EAST BUTTERFIELD ROAD ELMHURST, IL 60126

- I. Roll Call
- II. Approval of Committee Meeting Minutes of September 15, 2011

RECOMMENDED MOTION: To approve the Minutes of the September 15, 2011 Engineering & Construction Committee Meeting of the DuPage Water Commission.

- III. Report of Status of Construction/Operations
- IV. R-41-11--A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-9/11 at the October 20, 2011, DuPage Water Commission Meeting
- V. R-44-11--A Resolution Awarding a Contract for High Lift Pump Motor Re-Build at the DuPage Pumping Station
- VI. Discussion Items
- VII. Other
- VIII. Adjournment

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# MINUTES OF A MEETING OF THE ENGINEERING & CONSTRUCTION COMMITTEE OF THE DUPAGE WATER COMMISSION HELD ON THURSDAY, SEPTEMBER 15, 2011 600 EAST BUTTERFIELD ROAD ELMHURST, ILLINOIS

The meeting was called to order at 6:30 P.M.

Committee members in attendance: R. Furstenau, F. Saverino, and M. Scheck

Committee members absent: D. Loftus

Also in attendance: T. McGhee, E. Kazmierczak, J. Schori, and M. Weed.

Commissioner Saverino moved to approve the Minutes of the July 21, 2011 Engineering Committee. Motion seconded by Commissioner Furstenau and passed unanimously as follows:

Ayes:

R. Furstenau, F. Saverino and M. Scheck

Navs:

None

Absent:

D. Loftus

Manager of Operations McGhee provided an oral report highlighting the Status of Operations report;

Regarding R-40-11 Commissioner Furstenau inquired as to how the contract was awarded and if the project would be put out for bid. Manager of Operations McGhee indicated that AECOM was selected on the merits of their proposal and their ability to utilize their previous design of the last two DuPage County (DPC) facilities. Manager of Operations McGhee indicated that after the design was completed the construction of the DWC/DPC facility would be put out for competitive bidding.

Regarding QRE-5 Instrumentation/Remote Facilities Supervisor Schori indicated the project was far more complicated than originally thought; and he would solicit new estimates from both QRE contactors.

Commissioner Saverino asked if the new generation facility was ready for winter operations and if the problems with the air intakes had been resolved. Manager of Operations McGhee indicated that the facility was up and running and staff had started a generator exercising program to insure the facility would operate properly when needed. He also indicated the staff was working with the Design Engineers to resolve the heating and ventilation issues and the discussions were going well.

Commissioner Scheck asked if there was a COMED power pole in close proximity to the Steeple Run facility. Manager of Operations McGhee indicated that there was.

Commissioner Furstenau inquired as to the number of open contracts on the list provided in the Engineering packet. Manager of Operations McGhee indicated the majority of the projects were in their final stages and would be closed out shortly.

Commissioner Furstenau asked for an update on the Westchester street issue. Pipeline Supervisor Kazmierczak stated that he had complied with the Village's request for plans and specification from the original project. He also stated that he and the General Manager had inspected the street shortly after the August Board meeting and found indications that sewer and water main work had been completed in the street since he had visited the area last year when the Village first approached the Commission. Commissioner Scheck asked how old the street was and Pipeline Supervisor Kazmierczak stated the street was rebuilt as part of the Commission 72" project about 16 years ago.

Commissioner Furstenau moved to adopt item numbers IV and V under the Engineering & Construction Committee Agenda in a single group pursuant to the Omnibus Vote Procedures. Motion seconded by Commissioner Scheck and passed unanimously as follows:

IV. R-39-11—A Resolution Approving and Ratifying Certain Task Orders Under a Master Contract with EN Engineering, LLC at the September 15, 2011, DuPage Water Commission Meeting

V. R-40-11—A Resolution Approving and Authorizing the Execution of a Contract for Consulting Services for Design and Construction of a Joint Connection Facility

Ayes:

R. Furstenau, F. Saverino and M. Scheck

Nays:

None

Absent:

D. Loftus

Commissioner Furstenau moved to adjourn the meeting at 7:00 P.M. Motion seconded by Commissioner Saverino and passed unanimously as follows:

Ayes:

R. Furstenau, F. Saverino and M. Scheck

Navs:

None

Absent:

D. Loftus

BOARD/MINUTES/ENGINEERING/2011/ENG110915.doc



# DuPage Water Commission MEMORANDUM

TQ:

John Spatz

General Manager

FROM:

Terry McGhee

Manager of Water Operations

Ed Kazmierczak

Pipeline Supervisor

Chris Bostick

**Facilities Construction Supervisor** 

John Schori

Instrumentation Supervisor

Frank Frelka

**GIS Coordinator** 

Mike Weed

**Operations Supervisor** 

DATE:

October 13, 2011

SUBJECT:

Status of Operations

#### **Operations Overview**

The Commission's sales for the month of September were a total of 2.492 billion gallons. This represents an average day demand of 83.1 million gallons per day (MGD), which is lower than the September 2010 average day demand of 84.4 MGD. The maximum day demand was 101.1 MGD on September 2, 2011, which is higher than the September 2010 maximum day demand of 90.7 MGD. The minimum day flow was 69.0 MGD. The Commission's recorded total precipitation for the month of September was 3.45 inches compared to 2.78 inches for September 2010. The level of Lake Michigan for September 2011 is 577.87 (Feet IGLD 1985) compared to 577.94 (Feet IGLD 1985) for September of 2010.

#### Water Conservation

The Commission is sponsoring a high school and college video contest on water conservation. Winning film(s) will be featured on dpwc.org and preservingeverydrop.org. Winner(s) will also receive a trophy and be eligible for prizes from participating partners.

Jenessa Nesbitt attended the Third Annual Cantigny Green Fair on September 24, 2011. A memo about the event has been posted on preservingeverydrop.org as well as sent to our customers' conservation coordinators.

#### **Document Management**

Staff is in the process of moving documents into the databases on the Document Management System. Staff's goal is to move all documents to the Document Management System by November.

Staff is creating workflows that will be utilized through DocMinder, a Document Management add-on, for board preparation procedures as well as other procedural needs.

Work continues to complete the document inventory that will be sent to the Secretary of State for their destruction authorization.

#### Facilities Construction Overview

#### Contract PSD-7 DPPS Electrical Generation

Staff continues meeting with the design engineer to discuss outstanding design issues.

#### Contract PSC-4 Lexington Generation Facilities

We have received letters of final acceptance from the City of Chicago and the Contractor has posted all other required contractual documentation to garner final acceptance. Final payment is expected to be made on October 21<sup>st</sup> where all warranty periods will go in effect.

#### Contract PSC-5 Lexington Photovoltaic Cells

Tank Industry Consultants has performed post construction inspection of the interior surfaces of the Lexington concrete reservoirs and found no issues.

#### <u>DuPage County Service Areas</u>

Steeple Run: DuPage County is in process of posting adequate deposit to cover 125% of all proposed related costs.

York Township: We have been requested to develop estimates to provide a direct connection to this service area. This is a precursor to developing a joint connection facility agreement.

#### Instrumentation / Remote Facilities Overview

#### Annual Customer Meter Calibration Program

Maintenance and calibration of the test bench is complete. The program is scheduled to begin the third week of September.

#### Remote Facilities Maintenance

The annual tank site inspection and calibrations are complete. The annual remotely operated valve inspections and calibrations have begun.

#### Contract QRE-5/10 (Quick Response Electrical Contract)

Work Authorization Order # QRE-5.002 to repair the electrical service entrances at various meter stations is scheduled with ComEd for early September.

#### GIS

#### Infor EAM

The first part of this project is complete with installation of the Infor EAM 8.5 software on the new virtual server. Training on the new software features is scheduled for the week of October 10. The final portion of the upgrade project will consist of migrating all data to the production server will take place the first week of November.

Staff continues to look at integrating Infor EAM with the Incode financial accounting system.

#### ArcGIS Server Web Site

The GIS Coordinator has resumed work on developing a new GIS web site using ArcGIS Server version 10.

#### Paperless Agenda Project

Work continues on this project.

#### **Pipeline Construction Overview**

#### Contracts TOB-7/11 and TS-8

Work continues on project design and contract specifications for the Outer Belt Transmission Main Corrosion Mitigation Contract and the South Transmission Main Corrosion Mitigation Project (EN Engineering Task Order Nos. 13 and 6).

#### Contract VSR-1/11(Valve Stem Replacement)

Prototype valve stem risers have been assembled and installed. An RFP for fabrication services will be going out within the next several months after annual valve exercising has been completed.

#### Contract QR-9 (Quick Response Contract)

Work Authorization No.2 to Contract QR-9 (cathodic protection handhole adjustment and pavement repair on Harrison Street in the City of Hillside) appears on the October Commission meeting under R-41-11.

#### Other

EN Engineering has begun work on Task Order 21----Test Point Survey.

A valve actuator for a Remotely Operated Valve (ROV) located on the Commission's 90" transmission main has failed and as a consequence has rendered the valve inoperable. At the present time several short term solutions to correct the problem are being considered. In the long run though, replacement of the failed actuator may prove necessary in order to fully restore the functions of the valve.

Annual valve exercising is in progress and is expected to be completed by the end of November.

A meeting to discuss the Village of Westchester's pavement settlement issue has been scheduled for October 20<sup>th</sup>.

#### **OCTOBER 2011 COMMISSION AGENDA ITEMS:**

R-41-11---A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-9/11 at the October 20, 2011, DuPage Water Commission Meeting

R-44-11---A Resolution Awarding a Contract for High Lift Pump Motor Re-Build at the DuPage Pumping Station at the October 20, 2011, DuPage Water Commission Meeting

R-45-11--A Resolution Approving and Ratifying Certain Contract PSC-4/08 Change Orders at the October 20, 2011, DuPage Water Commission Meeting

#### Attachments:

- 1. DuPage Laboratory Bench Sheets for September, 2011
- 2. Water Sales Analysis 01-September 06 to 30-September- 2011
- 3. Chart showing Commission sales versus allocations
- 4. Chart showing Commission sales versus historical averages

Operations\Memorandums\Status of Oper\2011/10/13.doc

### DUPAGE WATER COMMISSION LABORATORY BENCH SHEET MONTHLY REPORT FOR SEPTEMBER 2011

#### LEXINGTON SUPPLY

#### DUPAGE DISCHARGE

DAY	FREE CL <sub>2</sub>	TURBIDITY	PO <sub>4</sub>	FREE CL <sub>2</sub>	TURBIDITY	TEMP	рH	Fluoride	PO₄	P.A.C.	ANALYST
	mg/l	NTU	mg/l	mg/l	NTU	°F			mg/l	LBS/MG	INT
1	0.83	0.13	0.55	0.87	0.10	74	7.6	1.1	0.54	0	RC
2	0.84	0.13	0.55	0.87	0.10	74	7.6	1.1	0.54	0	KD
3	0.88	0.12	0.49	0.86	0.09	72	7.6	1.1	0.51	0	GA
4	0.87	0.10	0.52	0.89	0.11	73	7.6	1.0	0.50	0	AM
5	0.84	0.11	0.51	0.85	0.09	70	7.7	1.1	0.50	0	GA
6	0.81	0.11	0.52	0.91	0.11	71	7.7	1.0	0.51	0	AM
7	0.86	0.09	0.52	0.95	0.10	70	7.6	1.0	0.49	0	RC
8	0.87	0.11	0.53	0.91	0.10	69	7.6	1.0	0.50	0	RC
9	0.81	0.11	0.50	0.90	0.10	69	7.6	1.0	0.54	0	RC
10	0.87	0.11	0.49	0.93	0.11	68	7.6	1.1	0.51	0	KD
11	0.88	0.11	0.49	0.92	0.08	69	7.6	1,1	0.53	0	GA
12	0.86	0.12	0.50	0.94	0.10	70	7.6	1.1	0.50	0	CT
13	0.87	0.11	0.53	0.96	0.08	69	7.6	1.0	0.52	0	GA
14	0.84	0.10	0.50	1.01	0.09	70	7.6	1.1	0.53	0	CT
15	0.85	0.09	0.53	0.98	0.09	70	7.6	1.0	0.50	0	RC
16	0.89	0.13	0.51	0.93	0.11	68	7.6	1.0	0.51	0	RC
17	0.84	0.12	0.50	0.94	0.10	66	7.6	1.1	0.52	0	GA
18	0.87	0.13	0.52	0.99	0.10	66	7.6	1.0	0.52	0	FG
19	0.85	0.12	0.54	0.97	0.09	66	7.6	1.0	0.53	0	GA
20	0.88	0.11	0.53	1.01	0.09	65	7.6	1.0	0.51	0	CT
21	0.81	0.09	0.51	0.92	0.10	65	7.6	1.1	0.51	0	GA
22	0.80	0.11	0.50	0.95	0.10	65	7.6	1.0	0.49	0	СТ
23	0.86	0.12	0.53	0.97	0.11	64	7.6	1.0	0.53	0	RC
24	0.81	0.10	0.50	1.01	0.10	64	7.6	1.0	0.52	0	FG
25	0.85	0.12	0.51	0.91	0.11	66	7.6	1.0	0.50	0	RC
26	0.86	0.11	0.52	0.98	0.10	66	7.7	1.0	0.51	0	FG
27	0.90	0.10	0.49	0.93	0.11	64	7.7	1.0	0.52	0	GA
28	0.85	0.10	0.51	1.01	0.12	64	7.7	1.1	0.51	0	CT
29	0.84	0.09	0.51	0.96	0.08	62	7.7	1.1	0.53	0	GA
30	0.89	0.11	0.52	1.00	0.12	62	7.6	1.0	0.51	0	СТ
AVG	0.85	0.11	0.51	0.94	0.10	68	7.6	1.0	0.51	0	
MAX	0.90	0.13	0.55	1.01	0.12	74	7.7	1.1	0.54	0	
MIN	0.80	0.09	0.49	0.85	0.08	62	7.6	1.0	0.49	0	

Terrance McGhee

Manager of Water Operations

01-May-92

TO

30-Sep-11

PER DAY AVERAGE

81,336,488

MONTH	SALES TO CUSTOMERS (GALLONS)	PURCHASES FROM CHICAGO (GALLONS)	GALLONS BILLED %	BILLINGS TO CUSTOMERS	BILLINGS FROM CHICAGO	DOCUMENTED COMMISSION WATER USE (2)	DOCUMENTED COMMISSION WATER USE %	TOTAL ACCOUNTED FOR %	DWC OPER. & MAINT. RATE (3)	CHGO RATE
May-08	2,474,831,000	2,566,584,008	96,43%	\$2,573,824.24	\$3,925,590.24	4,884,294	0,19%	96.62%	\$1.04	\$1.529
Jun-08	2,604,318,000	2,677,371,376	97.27%	\$2,709,084.64	\$4,095,039.52	1,964,000	0.07%	97.34%	\$1.04	\$1.530
Jul-08	3,152,495,000	3,254,898,777	96.85%	\$3,278,594.80	\$4,978,367.68	2,131,900	0.07%	96.92%	\$1.04	\$1.530
Aug-08	3,184,859,000	3,279,095,181	97.13%	\$3,312,253.36	\$5,015,376.08	2,353,100	0.07%	97.92%	\$1.04	\$1.530
Sep-08	2,552,623,000	2,619,576,751	97.44%	\$2,655,066.48	\$4,006,642.64	2,109,972	0.08%	97.52%	\$1.04	\$1.529
Oct-08	2,302,750,000	2,362,503,982	97.47%	\$2,855,410.00	\$3,613,449.84	7,923,498	0.34%	97.81%	\$1.24	\$1.529
Nov-08	2,096,015,000	2,165,230,363	96.80%	\$2,599,238.12	\$3,311,719.84	2,220,353	0.10%	96.91%	\$1.24	\$1.529
Dec-08	2,256,850,000	2,320,311,736	97.26%	\$2,798,494.00	\$3,548,916.80	2,283,006	0.10%	97.36%	\$1.24	\$1.529
Jan-09	2,293,548,000	2,349,026,333	97.64%	\$2,843,999.52	\$4,131,937.32	2,163,839	0.09%	97.73%	\$1.24	\$1.759
Feb-09	2,048,827,000	2,102,586,263	97.44%	\$2,540,545.48	\$3,696,346.65	1,967,373	0.09%	97.54%	\$1.24	\$1.758
Mar-09	2,141,079,000	2,198,279,067	97.40%	\$2,655,454.08	\$3,864,574.60	5,652,898	0.26%	97.66%	\$1.24	\$1.758
Apr-09	2,090,046,000	2,146,681,399	97.36%	\$2,591,657.04	\$3,773,865.90	2,265,801	0.11%	97.47%	\$1.24	\$1.758
May-09	2,446,586,000	2,522,765,415	96.98%	\$3,620,947.28	\$4,435,021.60	2,189,800	0.09%	97,07%	\$1.48	\$1.758
Jun-09	2,517,674,000	2,587,363,481	97.31%	\$3,726,157.52	\$4,548,585.00	2,202,450	0.09%		\$1.48	\$1.758
Jul-09	2,888,499,000	2,971,742,918	97.20%	\$4,274,978.52	\$5,224,324.05	2,030,397	0.07%	97.27%	\$1.48	\$1.758
Aug-09	2,931,183,000	3,010,833,874	97.35%	\$4,338,150.84	\$5,293,045.95	7,554,834	0.25%	97.61%	\$1.48	\$1.758
Sep-09	2,614,552,000	2,691,957,594	97.12%	\$3,869,536.96	\$4,732,461.45	1,994,945	0.07%	97.20%	\$1.48	\$1.758 \$1.758
Oct-09	2,155,177,000	2,204,779,266	97.75%	\$3,189,661.96	\$3,876,001.95	2,141,324	0.10%	97.85%	\$1.48	
Nov-09	2,003,572,000	2,054,392,036	97.53%	\$2,965,286.56	\$3,611,621.20	2,224,921	0.11%		\$1.48	\$1.758
Dec-09	2,124,149,000	2,174,881,342	97.67%	\$3,143,740.52	\$3,823,441.40	2,335,534	0.11%	97.77% 97.61%	\$1.48 \$1.48	\$1.758 \$2.005
Jan-10	2,152,708,000	2,207,536,160	97.52%	\$3,186,007.84	\$4,426,110.00	2,148,128 1,920,979	0.10% 0.10%		\$1.46 \$1.48	\$2,005
Feb-10	1,920,433,000	1,956,112,219	98.18%	\$2,842,240.84	\$3,922,005.00	3,367,754	0.10%	98.27% 97.62%	\$1.48	\$2.005
Mar-10	2,088,030,000	2,142,426,434	97.46%	\$3,090,284.40	\$4,295,565.00 \$4,331,880.00	2,162,448	0.10%		\$1,48	\$2.005
Apr-10	2,117,657,000	2,160,538,653	98.02%	\$3,134,132.36	\$4,331,860.00	2,162,446	0.1070	50.12 /6	φ1, <del>1</del> 0	<b>\$2.003</b>
May-10	2,493,442,000	2,546,177,057	97.93%	\$4,587,933.28	\$5,105,085.00	1,951,633	0.08%	98.01%	\$1.84	\$2.005
Jun-10	2,379,251,000	2,435,768,080	97.68%	\$4,377,821.84	\$4,883,715.00	1,052,920	0.04%	97.72%	\$1.84	\$2.005
Jul-10	2,977,683,000	3,048,231,920	97.69%	\$5,478,936.72	\$6,111,705.00	1,342,710	0.04%	97.73%	\$1.84	\$2.005
Aug-10	2,867,253,000	2,924,004,988	98.06%	\$5,27 <b>5</b> ,745. <b>52</b>	\$5,862,630.00	930,281	0.03%	98.09%	\$1.84	\$2.005
Sep-10	2,525,751,000	2,588,259,352	97.58%	\$4,647,381.84	\$5,189,460.00	1,085,300	0.00%		\$1.84	\$2.005
Oct-10	2,394,743,000	2,449,952,618	97.75%	\$4,406,327.12	\$4,912,155.00	1,143,788	0.05%		\$1.84	\$2.005
Nov-10	2,044,476,000	2,079,920,200	98.30%	\$3,761,835.84	\$4,170,240.00	955,414	0.05%		\$1.84	\$2.005
Dec-10	2,173,930,000	2,196,014,963	98.99%	\$4,000,031.20	\$4,403,010.00	943,234	0.04%		\$1.84	\$2.005
Jan-11	2,176,905,000	2,203,802,993	98.78%	\$4,005,505.20	\$4,418,625.00	6,094,505	0.28%		\$1.84	\$2.005
Feb-11	1,960,872,000		98.42%	\$3,608,004.48	\$3,994,590.00	3,351,469	0.17%		\$1.84	\$2.005
Mar-11	2,084,629,000		98.33%	\$3,835,717.36	\$4,250,460.00	875,189	0.00%		\$1.84	\$2.005
Apr-11	2,032,022,000	2,050,900,249	99.08%	\$3,738,920.48	\$4,112,055.00	674,574	0.03%	99.11%	\$1.84	\$2.005
May-11	2,342,971,000		98.25%	\$4,779,660.84	\$4,781,220.00	603,990	0.03%		\$2.04	\$2.005
Jun-11	2,467,779,000		97.67%	\$5,034,118.96	\$5,066,160.00	700,540	0.03%		\$2.04	\$2.005
Jul-11	3,211,413,000		98.02%	\$6,551,276.72	\$6,568,665.00	1,090,800	0.03%		\$2.04	\$2.005
Aug-11	2,733,016,000		98.33%	\$5,575,352.64	\$5,572,905.00	792,559	0.03%		\$2.04	\$2.005
Sep-11	2,486,823,000	2,533,174,564	98.17%	\$5,073,028.92	\$5,079,015.00	1,078,701	0.04%	98.21%	\$2.04	\$2.005
TOTALS (1)		593,278,691,812	97.23%	\$780,330,287.43	\$743,154,366.53	590,018,257	0.10%		\$1.35 ======	\$1.253

<sup>(1) -</sup> SINCE MAY 1, 1992 (2) - REPRESENTS DU PAGE PUMP STATION, METER TESTING AND CONSTRUCTION PROJECT USAGE

<sup>(3) -</sup> DOES NOT INCLUDE FIXED COST PAYMENTS



