



# DuPage Water Commission

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

**NOTICE IS HEREBY GIVEN THAT THE RESCHEDULED FEBRUARY 2011 REGULAR ENGINEERING & CONSTRUCTION COMMITTEE MEETING OF THE DUPAGE WATER COMMISSION WILL BE HELD AT 6:30 P.M. ON THURSDAY, FEBRUARY 10, 2011, AT 600 EAST BUTTERFIELD ROAD, ELMHURST, ILLINOIS 60126. THE AGENDA FOR THE RESCHEDULED FEBRUARY 2011 REGULAR ENGINEERING & CONSTRUCTION COMMITTEE MEETING IS AS FOLLOWS:**

## AGENDA

**ENGINEERING & CONSTRUCTION COMMITTEE  
THURSDAY, FEBRUARY 10, 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 February 11, 2010

**RECOMMENDED MOTION: To approve the Minutes of the February 11, 2010 Engineering & Construction Committee Meeting of the DuPage Water Commission.**

- III. Request by City of Naperville to Pay for the Cost of Relocation of Transmission Main at 75<sup>th</sup> Street and Washington Street
- IV. Report of Status of Construction/Operations
- V. Resolution No. R-2-11: A R Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-8/08 at the February 10, 2011, DuPage Water Commission Meeting.
- VI. Resolution No. R-3-11: A Resolution Directing Advertisement for Bids on a Contract for Quick Response Construction Work (Contract QR-9/11) at the February 10, 2011, DuPage Water Commission Meeting.
- VII. Resolution No. R-4-11: A Resolution Directing Advertisement for Bids on a Contract for High Lift Pump Motor Re-Build—Phase II at the February 10, 2011, DuPage Water Commission Meeting.

All visitors must present a valid drivers license or other government-issued photo identification, sign in at the reception area and wear a visitor badge while at the DuPage Pumping Station.

- VIII. Resolution No. R-5-11: A Resolution Approving a First Amendment to Task Order No. 2a under the Master Contract with Stantec Consulting Services Inc. at the February 10, 2011, DuPage Water Commission Meeting.
- IX. Resolution No. R-6-11: A Resolution Approving and Ratifying Certain Contract PSC-5/08 Change Orders at the February 10, 2011, DuPage Water Commission Meeting
- X. Resolution No. R-7-11: A Resolution Approving and Ratifying Certain Change Orders to the Contract for Supply of Engine Generator Units at the February 10, 2011, DuPage Water Commission Meeting.
- XI. Other
- XII. Adjournment

**MINUTES OF A MEETING OF THE  
ENGINEERING & CONSTRUCTION COMMITTEE  
OF THE DUPAGE WATER COMMISSION  
HELD ON THURSDAY, FEBRUARY 11, 2010  
600 EAST BUTTERFIELD ROAD  
ELMHURST, ILLINOIS**

The meeting was called to order at 7:02 P.M.

Committee members in attendance: W. Maio, L. Hartwig, W. Mueller and S. Louis Rathje *ex officio*.

Committee members absent: A. Poole

Also in attendance: R. C. Bostick, J. Schori, E. Kazmierczak, F. Frelka, and M. Weed.

Commissioner Mueller moved to approve the Minutes of the January 14, 2009 Engineering Committee. Motion seconded by Commissioner Hartwig and passed unanimously as follows:

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

The Committee reviewed the memorandum regarding the Status of Operations dated February 5, 2010.

Quick Response Contracts

- Repairs to Underground Electrical Service From Transformer To Meter Station (QRE4-006A) Authorized by R-66-09 \$10,126.21

Commissioner Hartwig moved to recommend to the Commission approval of payments in the amount of \$10,126.21 as part of the accounts payable, subject to submission of all contractually required documentation. Motion seconded by Commissioner Mueller and passed unanimously as follows:

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

Commissioner Mueller moved to recommend to the Commission approval of Resolution No. R-6-10: A Resolution Approving and Authorizing the Execution of a Master Contract with AECOM USA, Inc. for Professional Engineering Services at the February 11, 2010, DuPage Water Commission Meeting. Motion seconded by Commissioner Hartwig. Commissioner Hartwig asked why we were

Engineering Meeting Minutes February 11, 2010

renegotiating the contract. Staff replied that Commissioner Zay had requested the contract be renegotiated. Commissioner Hartwig also asked how often we evaluate our master contracts and if we have master contracts with other engineering firms? Staff replied that the Commission has master contracts with multiple engineering firms and they are renegotiated on an as needed basis. The motion passed unanimously as follows:

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

Commissioner Hartwig moved to recommend to the Commission approval of Resolution No. R-7-10: A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-8/08 at the February 11, 2010, DuPage Water Commission Meeting. Motion seconded by Commissioner Mueller and passed unanimously as follows:

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

Commissioner Hartwig moved to recommend to the Commission approval of Resolution No. R-8-10: A Resolution Approving and Authorizing the Execution of the City of Elmhurst Wireless Radio Alarm Lease at the February 11, 2010, DuPage Water Commission Meeting. Motion seconded by Commissioner Mueller. Commissioner Mueller asked why we were changing our service. Staff replied that the City of Elmhurst required the change due to their new wireless radio system and that there would be a decrease in the annual service charges due to the switch. The motion passed unanimously as follows:

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

Commissioner Hartwig moved to recommend to the Commission approval of Resolution No. R-9-10: A Resolution Approving and Ratifying Certain Contract Change Orders at the February 11, 2010, DuPage Water Commission Meeting. Motion seconded by Commissioner Mueller. Commissioner Maio asked if the work involved with these Change Orders had already been completed. Staff replied that some of the work tasks had already been completed. Commissioner Hartwig asked why the work was authorized without Board approval. Staff replied that some of the work tasks were involved with work already in progress and if the work had been stopped, it would have resulted in much higher costs and time delays. Commissioner Hartwig requested that all future Change Orders be approved by the Board in advance of work performed. Commissioner Mueller requested that a report listing all Changes Orders be included in the monthly Engineering package. The motion passed unanimously as follows:

Engineering Meeting Minutes February 11, 2010

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

Commissioner Mueller moved to adjourn the meeting at 7:30 P.M. Motion seconded by Commissioner Hartwig and passed unanimously as follows:

Aye: W. Maio, L. Hartwig, and W. Mueller  
Nay: None  
Absent: A. Poole

BOARD/MINUTES/ENGINEERING/2010/0211.docx



# DuPage Water Commission

## MEMORANDUM

TO: Chairman and Commissioners

FROM: Terry McGhee  
Acting General Manager

Ed Kazmierczak	Pipeline Supervisor
Chris Bostick	Facilities Construction Supervisor
John Schori	Instrumentation Supervisor
Frank Frelka	GIS Coordinator
Mike Weed	Operations Supervisor

DATE: February 3, 2011

SUBJECT: Status of Operations

### Operations Overview

The Commission's sales for the month of January were a total of 2.182.5 billion gallons. This represents an average day demand of 70.4 million gallons per day (MGD), which is higher than the January 2010 average day demand of 69.6 MGD. The maximum day demand was 72.6 MGD on January 23, 2011, which is lower than the January 2010 maximum day demand of 73.2 MGD. The minimum day flow was 68.0 MGD. The Commission's recorded total precipitation for the month of January was 0.92 inches compared to 1.13 inches for January 2010. The level of Lake Michigan for January 2011 is 576.81 (Feet IGLD 1985) compared to 577.92 (Feet IGLD 1985) for January of 2010.

### Water Conservation

The Commission has distributed 24 rain barrels to date and our customers are using them as displays for the public as well as promoting the sale of rain barrels to their residents. The Commission has also received 15 completed Utility Pledges and 12 status updates on the Utility Pledges.

The Village of Glendale Heights is looking into drafting a rain barrel ordinance and is presenting the pledge at their village's board meeting this month.

The Commission sponsored 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. There were no videos submitted for this contest. Staff is looking into pushing back the submission date.

The Commission participated in the Eight Annual DuPage Environmental Summit. This year's title of the summit is *Until the Last Drop: Water Conservation in DuPage County*. The summit was January 5, 2011 at Benedictine University. This presentation was so well received that it has been posted on [preservingeverydrop.org](http://preservingeverydrop.org) so the public can download it.

### **Document Management**

Staff has started the process of moving documents into the new databases.

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-6 Reservoir Addition - Division A – Equipment Storage Building and Material Storage**

The Engineer has submitted final draft of record drawings which are currently under review by staff.

#### **Contract PSD-7 DPPS Electrical Generation**

Final finish applications are ongoing. Support systems commissioning is underway. Progress Payment #24 appears on the Accounts payable. A table of change orders approved, pending or in development has been prepared for review. The project completion date remains December 31, 2010.

A memorandum has been prepared outlining Commonwealth Edison's final invoice for work related to the generation facility improvements.

#### **Generator Supply Contract**

Change Order No. 2 appears on the agenda as R-7-11 which requests Patten Industries to modify the portable generator from a manual fuel system fill to an automatic fuel system fill. A table of change orders approved, pending or in development has been prepared for review.

### Contract PSC-4 Lexington Pump Station Electrical Generation / Variable Frequency Drives

All work is complete with the exception second season commissioning and training. Money will be held back from the release of retainage to facilitate the completion of the work.

A memorandum has been prepared outlining Commonwealth Edison's final invoice for work related to the generation facility improvements.

### Contract PSC-5 Lexington Photovoltaic Cells

The photovoltaic system continues producing power for on-site consumption at the Lexington Pumping Station. All work is complete with the exception of displaying the PV System output on the DWC website. Change Order No. 3 appears on the February agenda as R-6-11. A table of change orders approved, pending or in development has been prepared for review. The project completion date remains October 21, 2010.

### Winfield Additional Connection – Contract MS-17/10

Electrical and instrumentation work is ongoing. The Contract Completion date remains November 20, 2010.

### DuPage County Service Areas

We are performing preliminary work with DuPage County Public Works regarding the Steeple Run service area.

### Instrumentation / Remote Facilities Overview

#### Annual Customer Meter Calibration Program

The customer meter calibration program began on October 5<sup>th</sup>; it is now 66% complete.

#### Remote Facilities Maintenance

The annual inspection and calibration at all Meter Stations continues.

Routine monthly inspections and maintenance is ongoing.

#### New Meter Station for Winfield

The Remote Terminal Unit (RTU) at MS27B is installed, waiting on the contractor to complete the antenna before communications can be established.



**GIS**

GIS staff is evaluating Manifold GIS software as a less expensive alternative to some of the ESRI ArcGIS software currently used. Although ESRI is the GIS market leader with robust and innovative products, the annual cost to the Commission for GIS software maintenance is over \$10,000. Continuing development of capable software alternatives by ESRI competitors make it prudent to at least evaluate the potential for savings in this area.

Staff is updating the GIS leak layer to account for the most recent and all historical leaks. This will also include a new attribute table with domains to categorize leaks by type, cause and disposition within the ArcGIS database management system.

**Pipeline Construction Overview**

Work to repair a leak on a Commission 72" transmission main has been substantially completed. A description of this work is can be found on the Commission's February agenda item R-2-11.

Preliminary design drawings and specifications for the Outer Belt Transmission Main Corrosion Mitigation Contract (EN Engineering Task Order #13) have been received and are currently under review.

Work has been completed and a preliminary report issued for work under EN Engineering Task Order 18 (Close Interval Survey).

Work has been temporarily suspended under EN Engineering Task Order No. 17 (Test Point Survey). This work will resume in the spring.

Bi-Annual Air Release valve inspections have begun.

**FEBRUARY 2011 COMMISSION AGENDA ITEMS:**

**R-2-11**----A Resolution Approving and Ratifying Certain Work Authorization Orders Under Quick Response Contract QR-8/08 at the February 10, 2011, DuPage Water Commission Meeting

**R-3-11**----A Resolution Directing Advertisement for Bids on a Contract for Quick Response Construction Work (Contract QR-9/11) at the February 10, 2011, DuPage Water Commission Meeting

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**Attachments:**

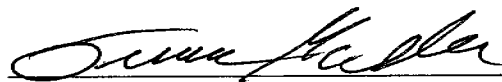
1. DuPage Laboratory Bench Sheets for January , 2011
2. Water Sales Analysis 01-April-06 to 31-Janaury- 2011
3. Chart showing Commission sales versus allocations
4. Chart showing Commission sales versus historical averages

DUPAGE WATER COMMISSION LABORATORY BENCH SHEET  
MONTHLY REPORT FOR JANUARY 2011

## LEXINGTON SUPPLY

## DUPAGE DISCHARGE

DAY	FREE CL <sub>2</sub>	TURBIDITY	PO <sub>4</sub>	FREE CL <sub>2</sub>	TURBIDITY	TEMP	pH	Fluoride	PO <sub>4</sub>	P.A.C.	ANALYST
	mg/l	NTU	mg/l	mg/l	NTU	°F		mg/l	mg/l	LBS/MG	INT
1	0.98	0.10	0.50	0.93	0.10	37	7.7	1.0	0.51	0	MR
2	0.99	0.10	0.50	0.95	0.07	36	7.6	1.0	0.50	0	RC
3	0.95	0.09	0.53	0.91	0.08	35	7.7	1.0	0.49	0	RC
4	0.96	0.10	0.51	0.90	0.09	35	7.7	1.1	0.48	0	RC
5	0.90	0.10	0.49	0.90	0.08	36	7.7	1.0	0.50	0	RC
6	0.91	0.09	0.47	0.89	0.08	36	7.7	1.1	0.46	0	GA
7	0.90	0.08	0.45	0.89	0.09	36	7.7	1.1	0.46	0	GA
8	0.91	0.09	0.47	0.89	0.08	36	7.7	1.2	0.44	0	GA
9	0.92	0.09	0.46	0.90	0.09	36	7.7	1.1	0.47	0	GA
10	0.91	0.10	0.50	0.91	0.08	36	7.7	1.1	0.50	0	RC
11	0.93	0.10	0.50	0.91	0.09	36	7.7	1.2	0.50	0	RC
12	0.91	0.10	0.50	0.89	0.09	36	7.7	1.2	0.45	0	RC
13	0.91	0.09	0.47	0.89	0.10	36	7.7	1.1	0.45	0	GA
14	0.93	0.10	0.48	0.90	0.08	36	7.7	1.2	0.47	0	GA
15	0.91	0.09	0.47	0.90	0.09	35	7.7	1.1	0.48	0	GA
16	0.95	0.10	0.49	0.92	0.09	35	7.7	1.1	0.49	0	GA
17	0.91	0.08	0.52	0.89	0.08	34	7.6	1.1	0.52	0	AM
18	0.90	0.10	0.56	0.88	0.08	34	7.7	0.9	0.52	0	RC
19	0.89	0.09	0.51	0.90	0.08	35	7.7	1.0	0.51	0	RC
20	0.91	0.10	0.53	0.90	0.09	35	7.7	1.1	0.53	0	RC
21	0.89	0.09	0.52	0.91	0.08	35	7.6	1.1	0.48	0	RC
22	0.88	0.08	0.47	0.91	0.10	34	7.7	1.1	0.42	0	GA
23	0.91	0.10	0.45	0.91	0.10	34	7.7	1.0	0.44	0	GA
24	0.91	0.08	0.45	0.93	0.09	34	7.7	1.1	0.44	0	GA
25	0.94	0.10	0.47	0.90	0.07	34	7.7	1.1	0.44	0	GA
26	0.92	0.08	0.51	0.90	0.09	34	7.7	1.1	0.48	0	RC
27	0.89	0.08	0.50	0.90	0.09	35	7.7	1.0	0.47	0	RC
28	0.90	0.09	0.48	0.88	0.08	34	7.7	1.1	0.50	0	RC
29	0.91	0.10	0.48	0.93	0.08	34	7.6	1.1	0.55	0	RC
30	0.93	0.10	0.50	0.89	0.08	36	7.7	1.2	0.46	0	GA
31	0.92	0.08	0.45	0.89	0.07	36	7.7	1.2	0.45	0	GA
AVG	0.92	0.09	0.49	0.90	0.09	35	7.7	1.1	0.48	0	
MAX	0.99	0.10	0.56	0.95	0.10	37	7.7	1.2	0.55	0	
MIN	0.88	0.08	0.45	0.88	0.07	34	7.6	0.9	0.42	0	



Terrance McGhee  
Manager of Water Operations

DU PAGE WATER COMMISSION  
WATER SALES ANALYSIS

01-May-92 TO 31-Jan-11

PER DAY AVERAGE 81,389,613

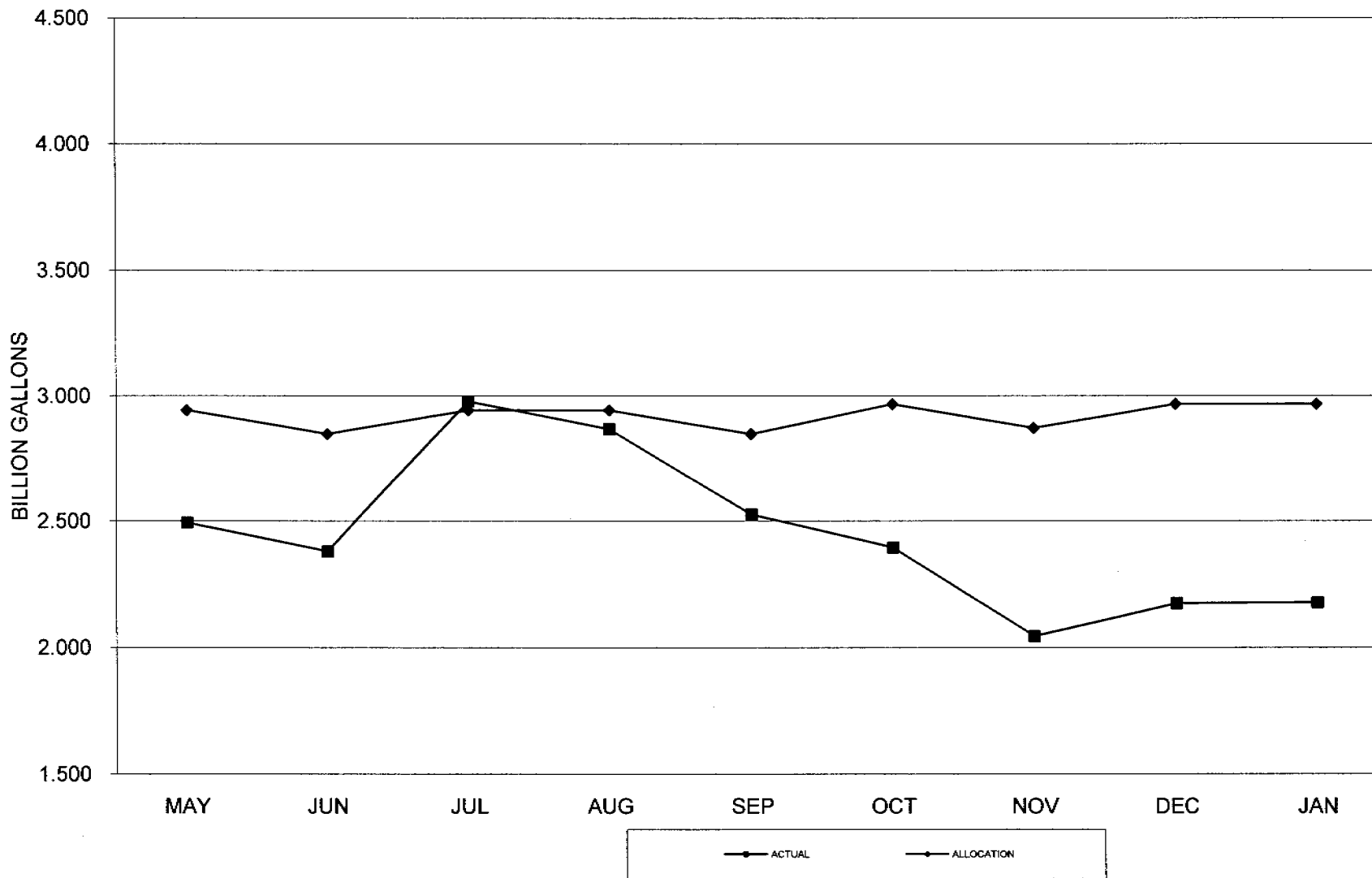
MONTH	SALES TO CUSTOMERS (GALLONS)	PURCHASES FROM CHICAGO (GALLONS)	GALLONS BILLED %	BILLINGS TO CUSTOMERS	BILLINGS FROM CHICAGO	DOCUMENTED COMMISSION WATER USE (2)	DOCUMENTED COMMISSION WATER USE %	TOTAL ACCOUNTED FOR %	DWC OPER. & MAINT. RATE (3)	CHC RAT
May-07	2,863,644,000	2,951,900,000	97.01%	\$2,978,988.48	\$3,926,001.00	4,012,875	0.14%	97.15%	\$1.04	\$1
Jun-07	3,292,831,000	3,396,024,774	96.96%	\$3,424,545.52	\$4,516,712.95	4,468,064	0.13%	97.09%	\$1.04	\$1
Jul-07	3,314,840,000	3,412,423,571	97.14%	\$3,447,433.60	\$4,538,523.35	4,456,650	0.13%	97.27%	\$1.04	\$1
Aug-07	2,883,008,000	2,966,379,286	97.19%	\$2,998,328.32	\$3,945,284.45	4,172,900	0.14%	97.33%	\$1.04	\$1
Sep-07	2,951,692,000	3,051,590,188	96.73%	\$3,070,294.72	\$4,058,614.95	3,977,217	0.13%	96.86%	\$1.04	\$1
Oct-07	2,512,609,400	2,578,045,000	97.46%	\$2,614,883.38	\$3,428,799.85	9,585,389	0.37%	97.83%	\$1.04	\$1
Nov-07	2,143,753,000	2,205,810,263	97.19%	\$2,230,952.72	\$2,933,727.65	10,390,297	0.47%	97.66%	\$1.04	\$1
Dec-07	2,228,281,000	2,292,016,165	97.22%	\$2,317,412.24	\$3,048,381.50	2,174,944	0.09%	97.31%	\$1.04	\$1
Jan-08	2,262,968,000	2,324,208,591	97.37%	\$2,353,486.72	\$3,554,877.04	2,134,597	0.09%	97.46%	\$1.04	\$1
Feb-08	2,145,137,000	2,197,527,140	97.62%	\$2,232,195.60	\$3,361,117.76	2,074,217	0.09%	97.71%	\$1.04	\$1
Mar-08	2,239,073,000	2,295,015,835	97.56%	\$2,328,635.92	\$3,510,226.72	2,041,001	0.09%	97.65%	\$1.04	\$1
Apr-08	2,177,771,000	2,244,319,320	97.03%	\$2,266,101.68	\$3,432,686.40	8,144,629	0.36%	97.40%	\$1.04	\$1
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
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
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
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
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
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
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
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
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
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
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
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
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
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%	97.39%	\$1.48	\$1
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
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
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
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	\$1
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%	97.63%	\$1.48	\$1
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%	\$1.48	\$1
Jan-10	2,152,708,000	2,207,536,160	97.52%	\$3,186,007.84	\$4,426,110.00	2,148,128	0.10%	97.61%	\$1.48	\$2
Feb-10	1,920,433,000	1,956,112,219	98.18%	\$2,842,240.84	\$3,922,005.00	1,920,979	0.10%	98.27%	\$1.48	\$2
Mar-10	2,088,030,000	2,142,426,434	97.46%	\$3,090,284.40	\$4,295,565.00	3,367,754	0.16%	97.62%	\$1.48	\$2
Apr-10	2,117,657,000	2,160,538,653	98.02%	\$3,134,132.36	\$4,331,880.00	2,162,448	0.10%	98.12%	\$1.48	\$2
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
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
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
Aug-10	2,867,253,000	2,924,004,988	98.06%	\$5,275,745.52	\$5,862,630.00	930,281	0.03%	98.09%	\$1.84	\$2
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%	97.58%	\$1.84	\$2
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%	97.79%	\$1.84	\$2
Nov-10	2,044,476,000	2,079,920,200	98.30%	\$3,761,835.84	\$4,170,240.00	955,414	0.05%	98.34%	\$1.84	\$2
Dec-10	2,173,930,000	2,196,014,963	98.99%	\$4,000,031.20	\$4,403,010.00	943,234	0.04%	99.04%	\$1.84	\$2
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%	99.06%	\$1.84	\$2
TOTALS (1)	557,518,848,400	573,615,315,253	97.19%	\$742,134,207.03	\$703,729,296.53	581,725,624	0.10%	97.30%	\$1.33	\$1

(1) - SINCE MAY 1, 1992

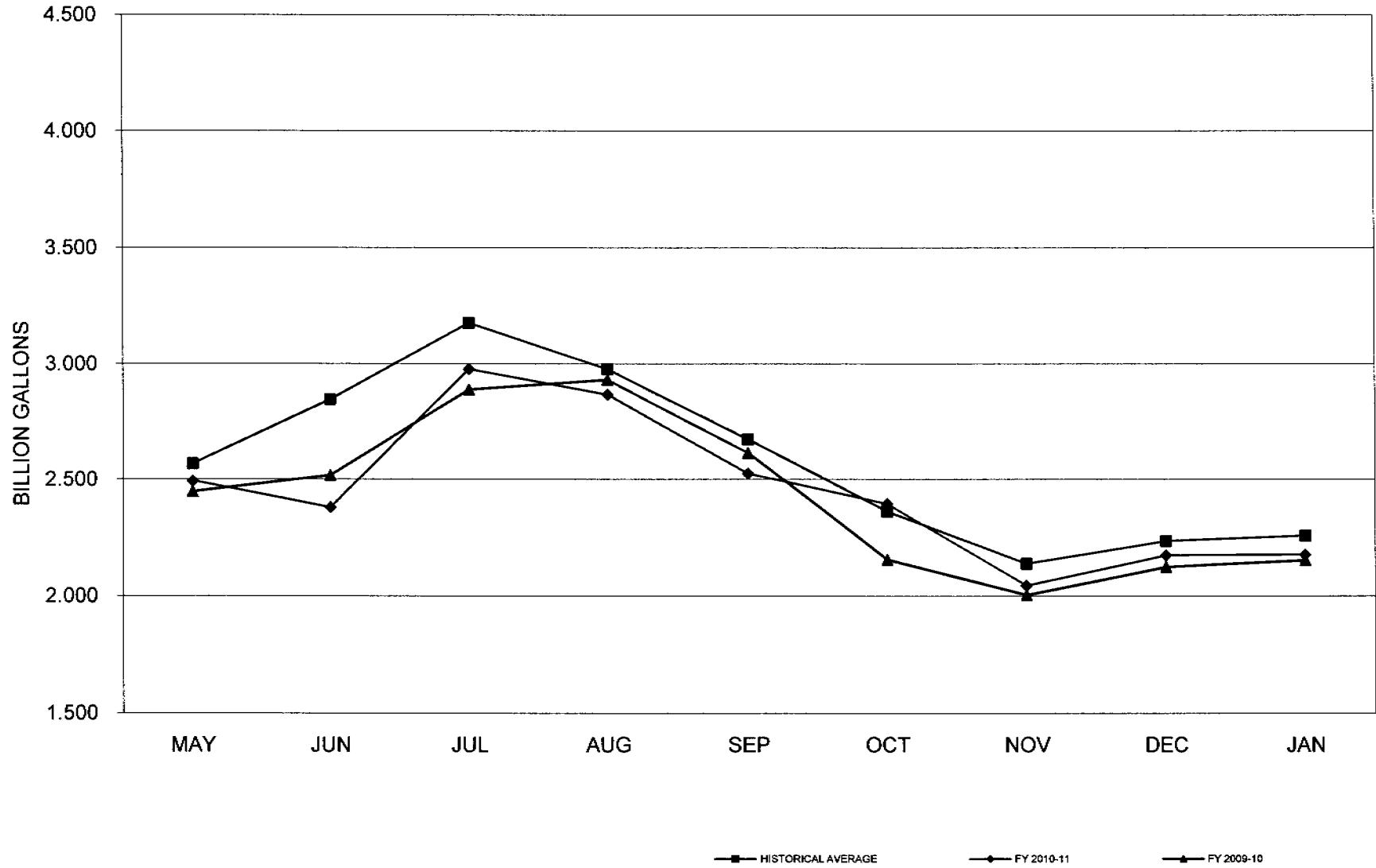
(2) - REPRESENTS DU PAGE PUMP STATION, METER TESTING AND CONSTRUCTION PROJECT USAGE

(3) - DOES NOT INCLUDE FIXED COST PAYMENTS

**DU PAGE WATER COMMISSION SALES  
FY 2010-11 VS. ALLOCATION**



**DU PAGE WATER COMMISSION SALES  
FY 2010-11 & FY 2009-10 VS. HISTORICAL AVERAGE**





# DuPage Water Commission

## MEMORANDUM

TO: Terry McGhee, Acting General Manager

FROM: Chris Bostick, Facilities Construction Supervisor

DATE: January 28, 2011

SUBJECT: Commonwealth Edison Project Costs for the Lexington and Elmhurst Electric Generation Projects

### History

In order to construct electric generation facilities, it was necessary to upgrade certain Commonwealth Edison (CECO) facilities and install new CECO facilities serving both the DuPage and Lexington Pumping Stations. CECO produced Customer Work Agreements (CWAs) which included cost estimates and required the posting of deposits to perform their system upgrades to service our new facilities. The following actions were reviewed and approved by the Commission:

Project Location	CECO Project Identifier or CWA	Estimated Cost	Deposit Required	DWC Approved
DuPage	PD-5P091400 <sup>1</sup>	850,000	772,000	09/13/2009
Lexington	PD-1P071447 <sup>2</sup>	817,000	743,000	10/14/2009

Now, CECO has returned with final costs for both projects, in which both CECO revised project costs exceed the original CECO estimates. The revised CECO project costs and amounts requested by CECO to make up the difference are as below:

Project Location	CECO Project Identifier or CWA	Revised Project Cost	Deposit Posted	Balance Requested by CECO 01/03/2011
DuPage	PD-5P091400	895,954	772,000	123,954
Lexington	PD-1P071447	940,363	743,000	197,363

Terms of the CECO agreements include the following language:

<sup>1</sup> Attached as Exhibit A

<sup>2</sup> Attached as Exhibit B

- □ This estimate is considered to be accurate within 10% and is based on standard review and witness test estimates. However, actual project costs, which include corporate overhead and operating allocations, will be billed at the end of the project. If the project cost is less than the stated estimate, ComEd will refund the difference. If the project costs exceed the estimate, ComEd will invoice the balance due.
- Delays related to permitting needs required by municipalities are not factored in to the schedule or costs estimates; Additional or different customer requirements may alter this preliminary cost estimate and projected schedule; ComEd will not begin construction at the ESS until customer site is prepared for ComEd work.
- ComEd is confident that we can complete the necessary work for you to begin parallel operation of generation contingent on ComEd receiving all information and payments on schedule and receiving permits from local and state authorities, as well as you meeting customer readiness dates throughout the project. A dispute over existing infrastructure could impact schedule and costs. □

Upon receipt of the CECO invoices <sup>(3,4)</sup>, staff requested the project accounting and in particular the justifications for costs which exceeded the estimates. CECO provided tables <sup>(5,6)</sup> which indicates a divisional breakdown of where expenses were occurred versus the original project estimates. Please note that the estimates shown in these tables do not match the estimates in the CWAs executed by DWC. In many cases, the expenses were less than estimated. Whenever the Commission receives invoices for extra work or credit memorandums, Staff and the project Engineers always request the back-up detail to determine if proper accounting is being performed.

Upon request of the back-up detail for the charges and explanations where the actual costs exceed the estimates, CECO advised that typically such detail is not provided. In lieu of back-up detail, CECO has provided a letter<sup>7</sup> in an attempt to explain where differences lay between the initial estimates and the final project cost.

Staff has made several requests for additional data to determine if there are costs associated with Contractor delays staff needed that information in order to assess if the Commission could back charge the Contractor. CECO has rebuffed these requests repeatedly over the last month. As a result, DWC may not have sufficient data to determine if any costs are associated with Contractor delays.

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<sup>3</sup> Attached as Exhibit C

<sup>4</sup> Attached as Exhibit D

<sup>5</sup> Attached as Exhibit E

<sup>6</sup> Attached as Exhibit F

<sup>7</sup> Attached as Exhibit G



### Budget Impact

The following table indicates the impact on the DWC budget for these two items that were included in the five-year Capital Improvement Program:

Project Location	Budget Fund	FY 2010-2011 Budget/CIP	Balance Requested by CECO 01/03/2011	Difference Under (Over) Budget
DuPage	01-60-7213.03	165,000	123,954	41,046
Lexington	01-60-8201.03	160,000	197,363	( 37,363)

### Conclusion

Staff needs a direction from the Commission whether to 1) pay the CECO invoices as presented, or 2) Hold payment until additional justification is received from CECO.

Please advise at your earliest convenience.

Kevin Hall  
Principle Project Manager

Telephone 630-437-2142

ComEd  
3 Lincoln Center  
Oakbrook Terrace, IL 60181

www.exeloncorp.com  
Kevin.Hall@exeloncorp.com

*Via Email*

August 12, 2009

Robert L. Martin  
General Manager  
DUPAGE WATER COMMISSION  
600 E. Butterfield Road  
Elmhurst, IL 60126-4642

Dear Mr Martin:

Thank you for your continued interest in locating a distributed generation facility in ComEd's service territory. This letter contains a construction phase estimate for your proposed project located at existing ComEd ESS D785 at 600 E Butterfield Road, Elmhurst, Illinois. This is a final cost estimate for ComEd to provide work for the facilities that must be installed to meet the needs of your facility. This letter covers information related to providing ComEd system modifications to accommodate 12,500 kW of cogeneration per ComEd's Project Diagram 5P091400. All of the requirements and information in this letter are intended to be read consistent with the provisions of ComEd's tariffs.

**GENERAL ASSUMPTIONS:**

- Estimate reflects 2009 tariffs and taxes with no escalation. Final cost will be based on applicable tariffs and taxes in effect at the time of service.
- Project scope provides no additional capacity, contingency, or redundancy above what is specifically stated. Change in scope will result in additional charges. Estimate does not include any enhanced reliability.
- Construction schedule to be developed by ComEd based on normal 40 hour workweek, without overtime or Holiday work.
- ComEd standard payment terms per applicable tariffs shall apply to all installations.
- Customer is responsible to obtain all permits and easements at customer's expense as necessary to support ComEd's construction schedule and installation methods, including but not limited to tree trimming without restriction.
- No landscaping and beautification will be provided by ComEd.
- All soil remediation is the responsibility of the customer.
- Costs do not include electrical usage charges.
- This estimate assumes you will not be selling the output of your generators.

**Preliminary Scope of Work:**

*Includes the following major components:*

- Replace existing L12067 relaying to accommodate cogeneration at TSS120 Lombard. Connect new relays to SCADA. Revise reclosing on L12067.
- Reset L12065 relaying at TSS120 Lombard and SS501 Lombard to accommodate new line configuration.

- Replace existing L6461 relaying to accommodate cogeneration at TSS64 Bellwood. Connect new relays to SCADA.
- Install 2 -- 300:1 line potential transformers on L6461 to accommodate cogen relay requirements for L6461.
- Install transferred trip transmitter for L12067 at TSS120 Lombard to isolate customer's generation at ESSD785.
- Install transferred trip transmitter for L6461 at TSS64 Bellwood to isolate customer's generation at ESSD785.
- Install transferred trip receiver at ESSD785 for L12067 for TSS120 Lombard. ComEd to order 2-class "A" phone circuits for this receiver, customer to pay monthly charges.
- Install transferred trip receiver at ESSD785 for L6461 from TSS64 Bellwood. ComEd to order 2-class "A" phone circuits for this receiver, customer to pay monthly charges.
- Install, Configure, and Program new Scada RTU panel at ESSD785.
- Witness customer testing of customer distributed generation relaying.
- Preliminary plan only valid for 90 days

*High-level schedule:*

- In-service 2009
- Assumes August 28, 2009 decision to proceed and return of signed letter with payment
- Assumes customer's schedule does not slip

Definitive cost range (prior to start of construction): \$695K to \$850K

**Key Basis For Estimate and Items Not Included:**

- This definitive estimate is good for 90 days and is subject to change without prior notice. Specifically, the configuration of ComEd's infrastructure changes continually to meet the needs of our customers and to ensure reliability. Capacity presently exists in the immediate area, but could be utilized by others on the distribution system. The amount of available capacity could change should another distributed generation customer commit first to proceed. Until ComEd receives a definitive order from a customer to proceed with a project along with the requested funds, ComEd will not know with certainty which customer location will be able to utilize the existing capacity. The revised cost and schedule estimate may increase substantially due to ComEd's need to make a considerable amount of additional investment in order to serve the planned distributed generation at this location (i.e., requested generation can no longer be accommodated using existing ComEd infrastructure).
- Additional or different customer requirements may alter this cost estimate and projected schedule.
- ComEd will not begin construction until customer site is prepared for ComEd work.
- Customer to perform on-site excavation and civil/subgrade (foundation) work required at customer site per ComEd specifications.
- Customer to provide all required conduits on customer site, wiring/fiber for required customer scada points, and AC feed(s) as required by ComEd P&C Engineering. Scada point list to be supplied to customer upon completion of detailed engineering.

*Estimate Does Not Include:*

- Does not include customer costs to install customer owned equipment per PD 5P091400 demarcation line and associated relay notes such as customer-owned relaying required by ComEd, fencing, conduit work, or housing of ComEd relays.
- Delays related to permitting needs required by municipalities are not factored in to the schedule or costs estimates.
- Does not account for other optional facilities charges.

ComEd is confident that we can complete the necessary work for you to begin parallel operation of generation contingent on ComEd receiving all information and payments on schedule and receiving permits from local and state authorities, as well as you meeting customer readiness dates throughout the project. A dispute over existing infrastructure, as described above, could also impact schedule and costs.

ComEd requires your commitment to begin moving forward with construction and a construction deposit payment of \$477,000 (\$772K - \$295K previously deposited) to perform construction and testing work. The deposit is based on 100% of the estimated construction and testing costs. Your commitment to move forward with the project will be based on ComEd's receipt of both a signed agreement document and deposit payment.

I appreciate the opportunity to be of assistance to you and should you have any questions, please call me at 630-437-2142.

Sincerely,

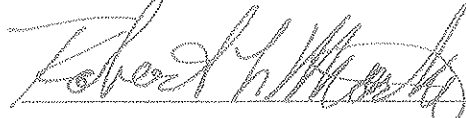
Kevin Hall  
Principle Project Manager – Industrial Customer Projects

cc: Ken Bowman, Project Management  
Joe Nuebauer, Large Customer Services

*ComEd Approvals:*

*Customer approval:*

 8/12/09  
Project Management Manager





An Exelon Company

**Kevin Hall**  
Principle Project Manager  
  
ComEd  
3 Lincoln Center  
Oakbrook Terrace, IL 60181

Telephone 630-437-2142  
  
www.exeloncorp.com  
Kevin.Hall@exeloncorp.com

***Via Email***  
September 22, 2009

**Robert L. Martin**  
General Manager  
DUPAGE WATER COMMISSION  
600 E. Butterfield Road  
Elmhurst, IL 60126-4642

Dear Mr Martin:

Thank you for your continued interest in locating a distributed generation facility in ComEd's service territory. This letter contains a construction phase estimate for your proposed project located at existing ComEd ESS Y323 at 5555 W. Lexington Ave., Chicago, Illinois. This is a final cost estimate for ComEd to provide work for the facilities that must be installed to meet the needs of your facility. This letter covers information related to providing ComEd system modifications to accommodate 11,000 kW of cogeneration per ComEd's Project Diagram 1P071447. All of the requirements and information in this letter are intended to be read consistent with the provisions of ComEd's tariffs.

**GENERAL ASSUMPTIONS:**

- Deposit request reflects 2009 tariffs and taxes with no escalation. Final bill/refund will be based on actual costs resulting from applicable tariffs and taxes in effect at the time of service.
- Project scope provides no additional capacity, contingency, or redundancy above what is specifically stated. Change in scope will result in additional charges. Estimate does not include any enhanced reliability.
- Construction schedule to be developed by ComEd based on normal 40 hour work week, without overtime or Holiday work.
- ComEd standard payment terms per applicable tariffs shall apply to all installations.
- Customer is responsible to obtain all permits and easements at customer's expense as necessary to support ComEd's construction schedule and installation methods, including but not limited to tree trimming without restriction.
- No landscaping and beautification will be provided by ComEd.
- All soil remediation is the responsibility of the customer.
- Costs do not include electrical usage charges.
- This estimate assumes you may be selling the output of your diesel units to ComEd, and the renewables credits from your photovoltaic array to the PJM market.

**Scope of Work:**

*Includes the following major components:*

- Replace existing 50/51N CO-6 relays with Schweitzer 351S-6 relays on three transformers at ESS Y323

- Reconfigure and Reprogram existing throw-over scheme and new relaying at ESS Y323 to accommodate proposed distributed generation & required scada
- Upgrade existing ComEd battery to support proposed relaying and scada
- Order Scada phone line to existing phone board at 5555 W. Lexington Ave., Chicago, Illinois. Customer to extend scada phone line to ComEd RTU panel in existing ESS Y323 control building.
- Customer to run new POTS line to meter base for renewables credit metering of photovoltaic array.
- Install, Configure, and Program new Scada RTU panel at ESS Y323
- Reconfigure and Reprogram remote end relaying at TSS 59 Cicero and TSS 30 Columbus Park to accommodate proposed distributed generation as necessary
- Witnessing of customer testing of customer distributed generation relaying
- This estimate letter is valid for 90 days; if unapproved at that time, costs will be re-calculated at prevailing rates.

*Preliminary high-level schedule:*

- In-service May 2010
- Assumes October 16, 2009 decision to proceed and return of signed letter with payment
- Assumes customer's schedule does not slip

**Definitive cost range (prior to any detailed engineering): \$743K +/- 10%, (\$669K - \$817K)**

**Key Basis For Estimate and Items Not Included:**

- This preliminary estimate is good for 90 days and is subject to change without prior notice. Specifically, the configuration of ComEd's infrastructure changes continually to meet the needs of our customers and to ensure reliability. Capacity presently exists in the immediate area, but could be utilized by others on the distribution system. The amount of available capacity could change should another distributed generation customer commit first to proceed. Until ComEd receives a definitive order from a customer to proceed with a project along with the requested funds, ComEd will not know with certainty which customer location will be able to utilize the existing capacity. The revised cost and schedule estimate may increase substantially due to ComEd's need to make a considerable amount of additional investment in order to serve the planned distributed generation at this location (i.e., requested generation can no longer be accommodated using existing ComEd infrastructure).
- Additional or different customer requirements may alter this preliminary cost estimate and projected schedule.
- ComEd will not begin construction at the ESS until customer site is prepared for ComEd work.
- Customer to provide all required phone lines, conduits, demarcation cabinet, wiring/fiber for required customer scada points, and AC feed(s) as required by ComEd P&C Engineering. Scada prints showing required scada points at terminal blocks in new demarc cabinet have been supplied to customer.

*Estimate Does Not Include:*

- Does not include customer costs to install customer owned equipment per PD 6P081401 demarcation line and associated relay notes such as customer-owned relaying required by ComEd, fencing, conduit work, or housing of ComEd relays.

- Delays related to permitting needs required by municipalities are not factored in to the schedule or costs estimates.
- Does not account for other optional facilities charges.

ComEd is confident that we can complete the necessary work for you to begin parallel operation of generation contingent on ComEd receiving all information and payments on schedule and receiving permits from local and state authorities, as well as you meeting customer readiness dates throughout the project. A dispute over existing infrastructure, as described above, could impact schedule and costs.

ComEd requires your commitment to begin moving forward with construction and a construction deposit payment of \$596,000 (\$743K - \$147K previously received) to perform construction and testing work. The deposit is based on 100% of the estimated construction and testing costs. Your commitment to move forward with the project will be based on ComEd's receipt of both a signed agreement document and deposit payment. This estimate is considered to be accurate within 10% and is based on standard review and witness test estimates. However, actual project costs, which include corporate overhead and operating allocations, will be billed at the end of the project. If the project cost is less than the stated estimate, ComEd will refund the difference. If the project costs exceed the estimate, ComEd will invoice the balance due.

I appreciate the opportunity to be of assistance to you and should you have any questions, please call me at 630-437-2142.

Sincerely,



Kevin Hall  
Project Manager – Industrial Customer Projects

cc: Ken Bowman, Project Management  
Joseph Neubauer, Large Customer Services

ComEd Approval:

  
Project Management Manager

Date 10/2/09

Customer approval:

   
Date 10/14/09

## FINAL CUSTOMER BILL

Invoice Date            January 3, 2011

Christopher Bostick  
DuPage Water Commission  
600 E Butterfield Rd  
Elmhurst, Illinois 60126

Project Name:        Elmhurst Pump Station  
Project ID:            08NBD060  
Payment Type:        Final  
Pending Balance:    \$123,954.18

Dear Christopher Bostick,

ComEd has completed the required engineering, design, construction and commissioning work associated with the Elmhurst Pump Station, at 6161 Butterfield Rd, Berkeley.

The original deposits received for performing this work was \$772,000.00 per the estimate letter dated 8/12/2009. This deposit was based on preliminary engineering and known scope at the time. As required by ICC Interconnection Rules this invoice documents the final project costs and any amounts due.

The total cost of this project is \$895,954  
The balance due for this project is \$123,954.18

The total cost for this project includes ComEd and Contractor direct charges, including materials and indirect allocations. A detailed break down of these charges is attached.

If you have any questions please free to call me directly.

Sincerely,

*Thomas D Byrne*

---

Thomas Byrne Project Manager  
Office Phone:    630-437-2752  
Cell Phone:      708-341-6868

---

Return this portion with your check made payable to ComEd  
All payments or correspondence should include the Project ID on all remittances.



An Exelon Company

Project Name:        Elmhurst Pump Station  
Project ID:            08NBD060

Payment Due By  
2/3/2011

**\$123,954.18**

Make Check Payable to: **ComEd**  
Mail Remittances To: ComEd Project Management  
To The Attention Of: *Thomas Byrne*  
Address: Three Lincoln Centre, 6<sup>th</sup> Floor  
Oak Brook Terrace, IL 60181



# FINAL CUSTOMER BILL

## TERMS AND DEFINITIONS

### **Direct Charges**

Controllable costs that are approved and charged to the Project.

Direct Costs include:

- The salaries and expenses of employees whose time can be directly assigned to specific projects are directly recorded as direct construction costs.
- ComEd Furnished Equipment and Materials
- Contractor Furnished Labor, Equipment and Materials
- Other such as equipment rentals, business travel, transportation, legal and real estate etc...

### **Indirect Charges**

When an entity requests ComEd to provide nonstandard services and/or facilities, ComEd is required by Illinois Commerce Commission (ICC) order (and reflected in its tariffs) to recover the costs of such nonstandard services and facilities. Such costs are not allowed to be passed on to other ratepayers but are to be recovered from the entity making the request.

Rider NS (nonstandard) was filed with the ICC and issued pursuant to the ICC order on rehearing in Docket No. 05-0597. Rider NS states "...Such larger, more, or different services or facilities are designated in this rider as nonstandard services and facilities....". Rider NS lists costs to be recovered for Non-Standard Services to include direct materials and labor, engineering, contractor services, department overhead, paid absence, general and administrative overhead, indirect labor costs, common indirect labor costs (later referred to as AIA) and material handling charges.

ComEd breaks out charges into two main categories, direct charges and indirect charges. Certain amounts are easily identifiable to specific construction projects and are direct charged. Other "overhead" charges that are not as practical to specifically identify are allocated to construction projects as appropriate, these are indirect charges.

Indirect charges include but are not limited to:

- **Supervision and Project Support** - The salaries and expenses of department heads, other supervisory employees, operations' support employees and certain information systems costs are allocated to construction projects on the basis of direct labor costs. The benefits of department heads, supervision and operations' support employees are included in this section as well.
- **Administrative and General Overheads** – Costs such as: administrative and general, legal, injuries and damages, and certain affiliated service company costs, may be applicable to construction projects. Applicable costs in this cost pool are then distributed to construction based on total costs of construction projects each month.
- **Affiliated Interest Agreement Overheads (AIA)** - These overheads represent other corporate support functions (not covered in G&A) such as Executive support, Accounting & Finance, Information Services, and Facilities among others. These functions support the work of our Operations and Technical Services areas and are billed out to charge a "fully distributed cost".

### Indirect Allocation Calculation

Allocation	Type of Costs	Calculation
Supervision & Project Support	Salaries, benefits and expenses of department heads, other supervisory employees and project support employees.	$C * (A/B) = \text{monthly project allocation}$ A = Monthly direct labor costs & contract labor costs (1 project) B = Total monthly direct labor & contract labor costs for all projects in the department C = Total monthly supervision and project support costs
Administrative & General (A&G)	A portion of legal, injuries and damages and affiliated service company costs attributable to construction.	$C * (D/E) = \text{monthly project allocation}$ C = Monthly Construction Administrative & General Expenses D = Monthly project capital additions (1 project) E = Total monthly amount of all capital additions
AIA (Affiliated Interest Agreement)	Support functions not included above such as executives, accounting, finance, information systems and facilities among others.	Rates set based on an annual analysis of costs.

## FINAL CUSTOMER BILL

<b>Project Total</b>		
	Category/Detail	Project Total
<b>ComEd Labor (\$)</b>	<b>Total ComEd Labor</b>	<b>\$179,108</b>
<b>Contractor Labor</b>	Engineering Services	\$79,900
	Testing & Other Services	\$47,367
	<b>Total O&amp;C Contracting</b>	<b>\$127,267</b>
<b>Materials</b>	Contractor Supplied Material	\$2
	Materials	\$192,852
	<b>Total Materials</b>	<b>\$192,854</b>
<b>Other</b>	Equipment Rental & Transportation	\$16,670
	Miscellaneous Other	\$53,554
	<b>Total Other</b>	<b>\$70,224</b>
<b>Total Directs</b>		<b>\$569,453</b>
<b>Indirect cost</b>	<b>Uncontrollable (Indirect) Costs</b> (includes Supervision and Project Support; and Administrative and General Overheads)	<b>\$220,092</b>
	<b>AIA (Affiliated Interest Agreement)</b>	<b>\$106,409</b>
	<b>Total Indirects</b>	
<b>Grand Total (Direct and Indirect)</b>		<b>\$895,954</b>
<b>CIAC Collected</b>		<b>\$772,000</b>
<b>Pending Balance</b>		<b>\$123,954.18</b>

FINAL CUSTOMER BILL

Invoice Date January 3, 2011

Christopher Bostick  
DuPage Water Commission  
600 E Butterfield Rd  
Elmhurst, Illinois 60126

Project Name: Lexington Pump Station  
Project ID: 07NBD130  
Payment Type: Final  
Pending Balance: \$197,363.13

Dear Christopher Bostick,

ComEd has completed the required engineering, design, construction and commissioning work associated with the Lexington Pump Station, at 5555 W Lexington St, Chicago.

The original deposits received for performing this work was \$743,000.00 per the estimate letter dated 9/22/2009. This deposit was based on preliminary engineering and known scope at the time. As required by ICC Interconnection Rules this invoice documents the final project costs and any amounts due.

The total cost of this project is \$940,363  
The balance due for this project is \$197,363.13

The total cost for this project includes ComEd and Contractor direct charges, including materials and indirect allocations. A detailed break down of these charges is attached.

If you have any questions please free to call me directly.

Sincerely,

*Thomas D Byrne*

Thomas Byrne Project Manager  
Office Phone: 630-437-2752  
Cell Phone: 708-341-6868

Return this portion with your check made payable to ComEd  
All payments or correspondence should include the Project ID on all remittances.



An Exelon Company

Project Name: Elmhurst Pump Station  
Project ID: 07NBD130

Payment Due By  
2/3/2011  
  
\$197,363.13

Make Check Payable to: **ComEd**  
Mail Remittances To: ComEd Project Management  
To The Attention Of: *Thomas Byrne*  
Address: Three Lincoln Centre, 6<sup>th</sup> Floor  
Oak Brook Terrace, IL 60181

# FINAL CUSTOMER BILL

## TERMS AND DEFINITIONS

### **Direct Charges**

Controllable costs that are approved and charged to the Project.

Direct Costs include:

- The salaries and expenses of employees whose time can be directly assigned to specific projects are directly recorded as direct construction costs.
- ComEd Furnished Equipment and Materials
- Contractor Furnished Labor, Equipment and Materials
- Other such as equipment rentals, business travel, transportation, legal and real estate etc...

### **Indirect Charges**

When an entity requests ComEd to provide nonstandard services and/or facilities, ComEd is required by Illinois Commerce Commission (ICC) order (and reflected in its tariffs) to recover the costs of such nonstandard services and facilities. Such costs are not allowed to be passed on to other ratepayers but are to be recovered from the entity making the request.

Rider NS (nonstandard) was filed with the ICC and issued pursuant to the ICC order on rehearing in Docket No. 05-0597. Rider NS states "...Such larger, more, or different services or facilities are designated in this rider as nonstandard services and facilities....". Rider NS lists costs to be recovered for Non-Standard Services to include direct materials and labor, engineering, contractor services, department overhead, paid absence, general and administrative overhead, indirect labor costs, common indirect labor costs (later referred to as AIA) and material handling charges.

ComEd breaks out charges into two main categories, direct charges and indirect charges. Certain amounts are easily identifiable to specific construction projects and are direct charged. Other "overhead" charges that are not as practical to specifically identify are allocated to construction projects as appropriate, these are indirect charges.

Indirect charges include but are not limited to:

- **Supervision and Project Support** - The salaries and expenses of department heads, other supervisory employees, operations' support employees and certain information systems costs are allocated to construction projects on the basis of direct labor costs. The benefits of department heads, supervision and operations' support employees are included in this section as well.
- **Administrative and General Overheads** – Costs such as: administrative and general, legal, injuries and damages, and certain affiliated service company costs, may be applicable to construction projects. Applicable costs in this cost pool are then distributed to construction based on total costs of construction projects each month.
- **Affiliated Interest Agreement Overheads (AIA)** - These overheads represent other corporate support functions (not covered in G&A) such as Executive support, Accounting & Finance, Information Services, and Facilities among others. These functions support the work of our Operations and Technical Services areas and are billed out to charge a "fully distributed cost".

### Indirect Allocation Calculation

Allocation	Type of Costs	Calculation
Supervision & Project Support	Salaries, benefits and expenses of department heads, other supervisory employees and project support employees.	$C * (A/B) = \text{monthly project allocation}$ A = Monthly direct labor costs & contract labor costs (1 project) B = Total monthly direct labor & contract labor costs for all projects in the department C = Total monthly supervision and project support costs
Administrative & General (A&G)	A portion of legal, injuries and damages and affiliated service company costs attributable to construction.	$C * (D/E) = \text{monthly project allocation}$ C = Monthly Construction Administrative & General Expenses D = Monthly project capital additions (1 project) E = Total monthly amount of all capital additions
AIA (Affiliated Interest Agreement)	Support functions not included above such as executives, accounting, finance, information systems and facilities among others.	Rates set based on an annual analysis of costs.

## FINAL CUSTOMER BILL

<b>Project Total</b>		
	Category/Detail	Project Total
<b>ComEd Labor (\$)</b>	<b>Total ComEd Labor</b>	<b>\$298,763</b>
<b>Contractor Labor</b>	Engineering Services	\$62,000
	Testing & Other Services	\$30,906
	<b>Total O&amp;C Contracting</b>	<b>\$92,906</b>
<b>Materials</b>	Contractor Supplied Material	\$0
	Materials	\$72,508
	<b>Total Materials</b>	<b>\$72,508</b>
<b>Other</b>	Equipment Rental & Transportation	\$0
	Miscellaneous Other	\$20,749
	<b>Total Other</b>	<b>\$20,749</b>
<b>Total Directs</b>		<b>\$484,926</b>
<b>Indirect cost</b>	<b>Uncontrollable (Indirect) Costs</b> (includes Supervision and Project Support; and Administrative and General Overheads)	<b>\$298,327</b>
	<b>AIA (Affiliated Interest Agreement)</b>	<b>\$157,110</b>
	<b>Total Indirects</b>	
<b>Grand Total (Direct and Indirect)</b>		<b>\$940,363</b>
<b>CIAC Collected</b>		<b>\$743,000</b>
<b>Pending Balance</b>		<b>\$197,363.13</b>

EXHIBIT E

ELMHURST PUMP STATION  
ESTIMATE VS ACTUAL

<b>Project Total</b>			
Category/Detail		Project Total	Estimate
<b>ComEd Labor (\$)</b>	<b>Total ComEd Labor</b>	\$179,108	\$205,559
<b>Contractor Labor</b>	Engineering Services	\$79,900	\$74,625
	Testing & Other Services	\$47,367	\$13,250
	<b>Total O&amp;C Contracting</b>	\$127,267	\$87,875
<b>Materials</b>	Contractor Supplied Material	\$2	\$0
	Materials	\$192,852	\$252,748
	<b>Total Materials</b>	\$192,854	\$252,748
<b>Other</b>	Equipment Rental & Transportation	\$16,670	\$0
	Miscellaneous Other	\$53,554	\$14,857
	<b>Total Other</b>	\$70,224	\$14,857
<b>Total Directs</b>		<b>\$569,453</b>	<b>\$561,079</b>
<b>Indirect cost</b>	<b>Uncontrollable (Indirect) Costs</b> (includes Supervision and Project Support; and Administrative and General Overheads)	\$220,092	\$216,562
	<b>AIA (Affiliated Interest Agreement)</b>	\$106,409	\$147,177
<b>Total Indirects</b>		<b>\$326,501</b>	<b>\$363,739</b>
<b>Grand Total (Direct and Indirect)</b>		<b>\$895,954</b>	<b>\$924,818</b>
<b>CIAC Collected</b>		<b>\$772,000</b>	
<b>Pending Balance</b>		<b>\$123,954.18</b>	

**EXHIBIT F**

**LEXINGTON PUMP STATION  
ESTIMATE VS ACTUAL**

<b>Project Total</b>			
Category/Detail		Project Total	Estimate
<b>ComEd Labor (\$)</b>	<b>Total ComEd Labor</b>	\$298,763	\$210,540
<b>Contractor Labor</b>	Engineering Services	\$62,000	\$61,875
	Testing & Other Services	\$30,906	\$14,254
	<b>Total O&amp;C Contracting</b>	\$92,906	\$76,129
<b>Materials</b>	Contractor Supplied Material	\$0	\$0
	Materials	\$72,508	\$92,779
	<b>Total Materials</b>	\$72,508	\$92,779
<b>Other</b>	Equipment Rental & Transportation	\$0	\$0
	Miscellaneous Other	\$20,749	\$16,883
	<b>Total Other</b>	\$20,749	\$16,883
<b>Total Directs</b>		<b>\$484,926</b>	<b>\$396,331</b>
<b>Indirect cost</b>	<b>Uncontrollable (Indirect) Costs</b> (includes Supervision and Project Support; and Administrative and General Overheads)	\$298,327	\$214,443
	<b>AIA (Affiliated Interest Agreement)</b>	\$157,110	\$137,985
	<b>Total Indirects</b>	<b>\$455,437</b>	<b>\$352,428</b>
<b>Grand Total (Direct and Indirect)</b>		<b>\$940,363</b>	<b>\$748,759</b>
<b>CIAC Collected</b>		<b>\$743,000</b>	
<b>Pending Balance</b>		<b>\$197,363.13</b>	

January 25, 2011

Christopher Bostick  
DuPage Water Commission  
600 E Butterfield Rd  
Elmhurst, IL 60126

Dear Christopher,

This letter will give the major issues and delays that caused the Lexington and Elmhurst projects to exceed the estimate. These are the major drivers that accounted for the invoices of \$197,363.13 for Lexington and \$123,954.18 for Elmhurst.

Lexington:

ComEd Labor accounted for the majority of the costs totaling about 46% of the overage. The following are the reasons for ComEd actuals exceeding the estimate:

- Numerous trips needed to be made by ComEd testing and substation personnel to complete installation outside of estimated time
- Customer schedule changes (i.e. watchman going 3 days instead of 1, CT's not fitting, incorrect relays installed)
- Modifications to ATO, design prints did not match installed wiring
- Additional time needed to reconcile physical wiring diagrams to station schematic
- Additional time witness testing of new scheme

Elmhurst:

The major driver for the actuals exceeding the estimate was due to the increased telecommunications work needed to complete the project, as shown in the Miscellaneous Other part of the invoice. The following were major delays incurred during the life of the project:

- Work at the Lombard end was underestimated due to complex wiring and difficult access.
- GE spent more than estimated troubleshooting with AT&T
- Difficulties installing router which required coordination with DPWC
- During testing of Audiotone it was found that relays were wired incorrectly
- While performing trip checks it was found the stations battery charger failed

ComEd work is now complete, yet the project is not fully in service due to work not completed in the customer gear. There will be no additional costs from ComEd associated with putting the project fully into service.



The above details the major unforeseen costs incurred over the course of this project that caused this project to exceed the estimate.

If have any questions please feel free to contact me directly

Sincerely,

*Thomas D Byrne*

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Thomas Byrne, Project Manager

ComEd

Office Phone: 630-437-2752

Cell Phone: 708-341-6868

<b>PSC-4 LEXINGTON GENERATORS AND VFD'S</b>				<b>ORIGINAL CONTRACT</b>	<b>\$17,209,000.00</b>
CHANGE ORDER	DATE APPROVED	CONTENT	COST	REVISED CONTRACT COST	
1	4/9/09	South Road Modifications	28,331.37	17,237,331.37	
2	9/10/09	Building Permit Related Work	204,866.51	17,442,217.88	
3	10/9/09	South Road Manhole Adjustment	3,270.43	17,445,468.31	
4	2/12/10	IDOT Permit Required Work	67,025.47	17,512,493.78	
5	4/15/10	Underground Fuel Storage Tank Permit Requirements and Roof Curb Additions	71,636.68	17,584,130.46	
6	6/10/10	City of Chicago Water Main Modifications	36,727.64	17,620,858.10	
7	10/14/10	Penthouse roofing credit	- 7,779.56	17,613,078.54	
8	12/09/10	Fuel Oil Pump Electric ComEd Building LV Electric Generator Exhaust Stacks	\$88,870.66	17,701,949.20	CUMULATIVE CHANGE ORDER PERCENTAGE THROUGH CO 8 <b>2.86%</b>
<b>PSC-5 LEXINGTON PHOTOVOLTAIC</b>				<b>ORIGINAL CONTRACT</b>	<b>\$7,996,000.00</b>
CHANGE ORDER	DATE APPROVED	CONTENT	COST	REVISED CONTRACT COST	
1	8/14/09	Expansion of 24 KW from ILDCEO Grant received	250,000.00	8,246,000.00	CUMULATIVE CHANGE ORDER PERCENTAGE THROUGH CO 2 <b>3.13%</b>
2	10/14/10	Contract Time extension of 92 Calendar Days	N/A	N/A	
3	Appears on February 10, 2011 Agenda	Additional Conduit Work	4,111.00	8,250,111.00	<b>PROPOSED CHANGE ORDER 3.17%</b>
<b>PSD-7 DUPAGE GENERATORS/OFFICE/GARAGE EXPANSION</b>				<b>ORIGINAL CONTRACT</b>	<b>\$16,970,000.00</b>
CHANGE ORDER	DATE APPROVED	CONTENT	COST	REVISED CONTRACT COST	
1	2/6/09	Building Permit Required Work - Garage	78,175.00	17,048,175.00	
2	5/15/09	Sanitary Casing/Demolition and Storm water Work	36,131.00	17,084,306.00	
3	7/10/09	Structural/Architectural Modifications	14,279.00	17,098,585.00	
4	8/14/09	ComEd Work, IDOT Permit Required Work, Add Gypsum and Knee Wall	33,179.00	17,131,764.00	
5	10/9/09	Roof and Underground Piping Modifications, Water Stop Addition	29,861.00	17,161,625.00	
6	2/12/10	15 Items; Electrical, Data, Natural Gas Piping, Fall Protection, Water Main Work and Credit, Mechanical Work, Permit Required Sanitary Vents	74,959.00	17,236,584.00	
7	3/11/10	Combination Motor Starters, Fuel/Oil Piping Modifications	18,576.00	17,255,160.00	
8	5/13/10	2 Items; Relocation of Fire Suppression System Piping and Meter Vault adjustment	3,947.00	17,259,107.00	

DuPage Water Commission  
 Facilities Construction Change Order Log

February 3, 2011

PSD-7 DUPAGE GENERATORS/OFFICE/GARAGE EXPANSION (Continued)			ORIGINAL CONTRACT	\$16,970,000.00	
CHANGE ORDER	DATE APPROVED	CONTENT	COST	REVISED CONTRACT COST	
9	7/13/10	HVAC Modifications, Access Ladder, Concrete Sidewalks □ Stairs, Lighting Modifications and Security System Enhancements	302,241.00	17,561,348.00	
10	8/12/10	Demolition Credit, Electrical Wiring, Eliminate Data Racks, Balancing a Previous CO Item, Power Relays, Conduit Install and Flow Switches	18,493.00	17,579,841.00	
11	10/14/10	Plumbing Demolition Credit Security Conduit Extension Fire Detection/Alarm System Additional Light Fixture	28,284.00	17,603,125.00	
12	11/11/10	Conduit and Cabling for Exterior Lighting Control and Contract Time Extension	1,185.00	17,604,310.00	
13	01/13/11	HVAC Panel Consolidation, Addressable Smoke Detectors in AHU's, SCADA Data Cabling/Connections	17,048.00	17,621,358.00	CUMULATIVE CHANGE ORDER PERCENTAGE THROUGH CO 13 <b>3.84%</b>
TBD	TBD	Return Air Fan Motor Change, Fuel Hoses, HVAC/Fire System Control and Fuel Management System	Under Review	TBD	TBD
SUPPLY OF ENGINE GENERATORS			ORIGINAL CONTRACT	\$6,417,608.00	
CHANGE ORDER	DATE APPROVED	CONTENT	COST	REVISED CONTRACT COST	
1		Revised Delivery Dates	0.00	N/A	<b>PROPOSED CHANGE ORDER PERCENTAGE</b> <b>0.43%</b>
2	Appears on February 10, 2011 Agenda	Modifications to Fuel Delivery System	Estimated 27,712.00	6,445,320.00	

**Open Contracts Summary  
Ending January 31, 2011**

Contractor	Project	Contract Amount	Approved Change Orders	Current Contract Amount	Contract Commencement Date	Contract Completion Date	Percent Complete (1)	Percent Change from Previous Month (1)
<b>Construction</b>								
DIVANE BROS ELECTRIC CO.	PHOTOVOLTAIC SYSTEM AT THE LEXINGTON PUMPING STATION	\$ 7,996,000.00	\$ 250,000.00	\$ 8,246,000.00	July 21, 2008	October 21, 2010	90%	0%
PATTEN INDUSTRIES, INC.	SUPPLY OF ENGINE GENERATORS	\$ 6,417,608.00	\$ -	\$ 6,417,608.00	September 13, 2007		90%	0%
JOSEPH J HENDERSON AND SON	ELECTRIC GENERATION FACILITY AND VARIABLE FREQUENCY DRIVES AT THE LEXINGTON PUMPING STATION	\$ 17,209,000.00	\$ 404,078.54	\$ 17,613,078.54	July 21, 2008	October 21, 2010	100%	0%
WILLIAMS BROTHERS CONSTRUCTION CO.	ELECTRIC GENERATION FACILITIES, GARAGE AND OFFICE EXPANSION AT THE DUPAGE PUMPING STATION	\$ 16,970,000.00	\$ 652,652.00	\$ 17,622,652.00	November 25, 2008	December 31, 2010	99.995%	0.795%
MARTAM CONSTRUCTION, INC.	WINFIELD METER/PRESSURE ADJUSTING STATIONS 17B	\$ 209,760.00	\$ 810.00	\$ 210,570.00	March 25, 2010	November 20, 2010	99%	0%
<b>Services</b>								
GREELEY AND HANSEN LLC	LEXINGTON PUMP STATION PHOTOVOLTAIC ENGINEERING	\$ 1,178,236.00	\$ -	\$ 1,178,236.00	January 12, 2007		100%	0%
GREELEY AND HANSEN LLC	LEXINGTON PUMP STATION GENERATOR/VFD ENGINEERING	\$ 2,670,676.00	\$ -	\$ 2,670,676.00	January 12, 2007		100%	0%
CAMP DRESSER MCKEE	DUPAGE PUMP STATION GENERATION ENGINEERING	\$ 2,004,688.00	\$ -	\$ 2,004,688.00	November 10, 2003		68%	0%
CAMP DRESSER MCKEE	SUPPLY OF ENGINE GENERATORS ENGINEERING	\$ 146,227.00	\$ -	\$ 146,227.00	January 11, 2007		90%	0%
AECOM	WINFIELD METER/PRESSURE ADJUSTING STATIONS 17B	\$ 71,700.00	\$ -	\$ 71,700.00	June 9, 2006		80%	5%

(1) Completion based on approved/pending contractor invoices