UTILITY COMMITTEE

A G E N D A

August 8, 2011 - 5:00 P.M. - Council Chambers - City Hall - City of Dover

Public comments are welcomed on any item and will be permitted at appropriate times. When possible, please notify the City Clerk (736-7008 or e-mail at CityClerk@dover.de.us) should you wish to be recognized.

AGENDA ADDITIONS/DELETIONS

1. PACE/NAES Monthly Report *(May)*

2. Update - Green Energy Funding and Programming

3. Proposed Ordinance #2011-20 - Chapter 110 - Utilities, Article III - Water Service, Division 1 - Generally, Section 110-67 - Private Wells

4. Adjournment by 5:30 P.M.

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THE AGENDA ITEMS AS LISTED MAY NOT BE CONSIDERED IN SEQUENCE. THIS AGENDA IS SUBJECT TO CHANGE TO INCLUDE THE ADDITION OR THE DELETION OF ITEMS, INCLUDING EXECUTIVE SESSIONS.

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City of Dover

May Monthly Report

Energy and Operations Management

June 23, 2011

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This Report does contain some forward-looking opinions. Certain unanticipated factors could cause actual results to differ from the opinions contained herein. Forward-looking opinions are based on historical and/or current information that relate to future operations, strategies, financial results or other developments. Some of the unanticipated factors, among others, that could cause the actual results to differ include regulatory developments, technological changes, competitive conditions, new products, general economic conditions, changes in tax laws, adequacy of reserves, credit and other risks associated with City of Dover and/or other third parties, significant changes in interest rates and fluctuations in foreign currency exchange rates.

Further, certain statements, findings and conclusions in this Report are based on Pace Global's interpretations of various contracts. Interpretations of these contracts by legal counsel or a jurisdictional body could differ.

PACE GLOBAL

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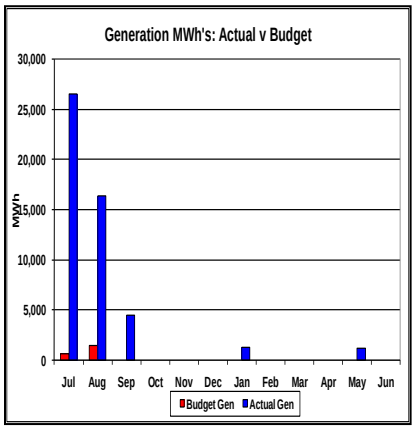
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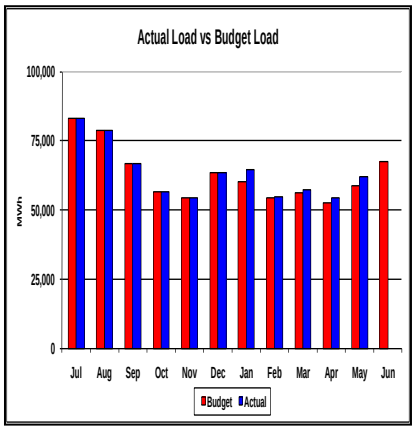
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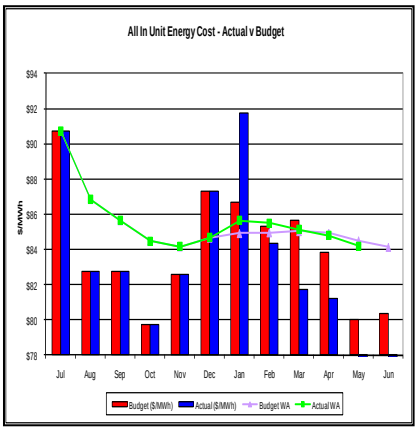
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1.0 – EXECUTIVE SUMMARY







Purchased Power Management

Wholesale load for the month of May was 62,114 MWhs, versus a weather normalized projected load of 58,744 MWhs. Hedged transactions accounted for 51,360 MWhs or 83% of this volume (87% of forecasted load) at a cost of $3.56 million. Spot Market purchases resulted in a PJM charge of $639 thousand (a $662 thousand charge in the Day Ahead market and a $23 thousand credit in the Real Time market). Other PJM related charges accounted for an additional cost of $1.53 million, inclusive of all load related fees. The May Energy Only Unit Cost, excluding capacity obligations and credits, was $2.16/MWh favorable compared to the budgeted value of $80.01/MWh. On January 24, 2011, the City of Dover reviewed and approved Pace's and NAES' submittal of a revised budget for Dover's FY2010-11 (the "Reset Budget"). The purpose of this Reset Budget was to provide a mid-year update as to the anticipated cost-of-service for FY2010-11. Dover's projected all in Cost of Service for FY2010-11 is $89.87/MWh, or $0.58/MWh favorable as compared to the Reset Budget[1].

Generation and Asset Management

Net generation for the month of May credited by PJM was 1,218 MWhs and the budget did not expect any generation. On May 31 both McKee Unit 3 and Van Sant Unit 11 were dispatched by PJM. In aggregate, Dover's units were dispatched for 22 hours during the month, creating a generation production margin of $71 thousand (after fuel costs).

The McKee units completed its spring outage on May 23 which started on March 28. On May 16, McKee units performed operational testing under natural gas and fuel oil to verify working status of controls modification made to the burner management system.

[1] The projected all in Cost of Service is based on YTD actual results for 11 months and 1 month of projected costs. The Reset Budget was reviewed and approved by City of Dover.

Emissions Allowance Management

Given the regulatory uncertainty surrounding the allowance markets, Dover has elected not to include revenues from emission allowance sales in its 2010-2011 fiscal year budget. Dover purchased and retired 53 NO_X seasonal allowances on November 23rd 2010, in order to meet their 2010 NO_X seasonal compliance position. Additionally, Dover purchased 22 NO_X annual allowances on February 11, 2011, in order to cover their 2010 NO_X annual compliance position. In January 2011, Dover was allocated 1,988 SO_2 allowances, 42 NO_X seasonal allowances, and 76 NO_X annual allowances. Dover has the appropriate number of allowances were set aside for retirement (see Exhibit 1).

Exhibit 1: Emissions and Allowance Summary through May 31, 2011

2010-2011 EMISSIONS & ALLOWANCE SUMMARY								
		SO_2			NO_x			
Date	Action	Allowance Allocation	Sale Price	Revenue[1]	Allowance Allocation[2]		Sale Price	Revenue[1]
					Seas.	Ann.		
1/1/08	2007 Carryover	549			0	--	--	--
1/1/09	2008 Carryover	2,691			0			
1/1/09	2009 Allocation	2,723	--	--	53	80	--	--
2/1/10	2010 Allocation	1,988			50	78		
1/1/11	2011 Allocation	1,988			49	76		
4/1/11	2011 Reallocation				2			
N/A	2003-2006 Carryover	139						
9/29/09	SO2 Sales	(1,500)						
11/12/09	NO_X Ann. Sales					(45)		
11/13/09	SO2 Sales	(1,410)						
11/20/09	NOx Seas. Sales				(25)			
12/31/09	2009 YTD Emissions[3]	(1)	--	--	(6)	(13)	--	--
12/31/10	2010 YTD Emissions	--	--	--	(54)	(54)	--	--
10/31/10	EPA Linearity Testing Req.				(68)	(68)		
2011	2010 Deficit NOx Purchases				53	22		
12/31/11	2011 YTD Emissions	(2)			(2)	(4)		
Totals - Allowances		**3,189 pre-CAIR 3,976 CAIR[3]**	**--**	**$0**	**52**	**72**	**--**	**$0**
								$0
								$0
						Total Revenue		**$0**

Notes:

(1) Revenue calculations account for a $0.50/ton broker fee for SO_2, $10/ton broker fee for NO_x annual and $5/ton broker fee for NO_X seasonal.

(2) Per the Clean Air Interstate Rule, in 2009, NOx emissions will be governed by a seasonal and annual program. The NO_x seasonal emissions pertain only to emissions (May 1 – Sep 30), similar to the previous trading regimen. Annual emissions cover the entire year.

(3) CAIR allowances are retired at a rate of 2 allowances for each ton emitted. Pre-CAIR allowances retain a 1 allowance to 1 ton value for compliance. It is assumed that pre-CAIR allowances will be retired before CAIR allowances.

Given current dispatch expectations, the market value of the remaining 2007-2011 Dover allowance inventory is approximately $36,848.75 at the time of this report. This represents 3,189 pre-CAIR SO_2 allowances trading at $3.75/ton, 3976 post-CAIR SO_2 allowances trading at $2.50/ton, 72 NO_x annual allowances trading at $195/ton, and 52 NO_x seasonal allowances trading at $17.50/ton.

EMISSIONS & ALLOWANCE SUMMARY Through May 31, 2011						
Allowance Vintage	Allowance Allocation	Emissions Month	Emissions	Allowances Sold Month	Allowances Sold	Allowance Balance
SO_2 – 2007-10	10,157	N/A	131	N/A	4,847	5,179
SO_2 – 2011	1,988	0	2	0	0	1,986
NO_x Annu – 2009	80	0	13[2]	0	45	22
NO_x Seas – 2009	53	0	6	0	25	22
NO_x Annu – 2010	78	0	122	0	(22)	(22)
NO_x Seas – 2010	50	0	122	0	(53)	(19)
NO_x Annu – 2011	76	1	4	0	0	72
NO_x Seas – 2011	51[3]	2	2	0	0	49

Operations Management Summary

During the month of May, there were no reportable or lost time accidents or injuries. The facility has now gone 229 days without an OSHA recordable accident and 229 consecutive days without a lost time reportable accident. There were zero Environmental Notices of Violations issued. There were three near miss events and three environmental deviations. Unit 3 was dispatched once and Unit 11 was dispatched twice with one of these dispatches later canceled.

Monthly Budget Variance - The actual expenses attributable to O&M of the two sites for the month of May were $445,311. The expenses were $17,203 or 4.02% over the approved budget of $428,108. The principal reason for the negative variance is due to higher than budgeted expenses in electric and combustion turbine maintenance which were partially offset by lower costs in personnel expenses and materials.

[2] Approximately 10 tons of NOx emissions resulted from the February 2010 McKee Run testing associated with the Pollution Remediation project and the June 2010 emission testing project.
[3] The EPA reallocated 2 additional seasonal NOx allowances into the McKee Run 2011 account.

Risk Management Summary

Forward PJM power prices were mixed since the last reporting period. Prices increased as above average temperatures were seen across much of the country, pushing the nearer term of the forward curve higher while the further out portion fell slightly. Forward Dover Zone power prices for FY 2011-2012, FY 2012-2013, FY 2013-2014, and FY 2014-2015 all changed by approximately -$0.91/MWh to $0.90/MWh (representing a range of a -1.50% decrease and a 1.71% increase, respectively) compared with the last reporting period.

The individual years' hedge ratios and Cost-of-Service projections are shown in the table below:

Wholesale Cost-of-Service Summary (Projected)

Date 6/16/2011	**Budget**		**June**		**May**	**Apr**
Power Year	Cost-of-Service Budget	Cost-of Service $/MWh[1]	Hedge Ratio	Year-to Year Increase	Cost-of Service $/MWh	Cost-of Service $/MWh
2010-2011	$82.15	$85.86	88%	-3.7%	$85.93	$85.83
2011-2012	N/A	$79.66	85%	-7.2%	$79.47	$79.53
2012-2013	N/A	$72.93	76%	-8.4%	$72.91	$73.02
2013-2014	N/A	$71.60	48%	-1.8%	$71.87	$71.96
2014-2015	N/A	$71.05	22%	-0.8%	$71.80	$71.75

[1] *Note that the "Cost-of-Service" column does not reflect the SREC benefit the City will receive since the SREC prices are currently unknown*

**Difference in COS from asset management due to generation & O&M*

***Not inclusive of budget update*

2.0 – BUDGET REPORT

2.1 – VARIANCE REPORT

	Budget May-11	Actual May-11	Variance May-11
Load Forecast	**58,744**	**62,114**	**(3,370)**
Power Supply			
Power Supply	$3,608,499	$3,560,754	$47,745
Power Supply Management	$188,947	$186,272	$2,674
Capacity Charges - Load	$1,078,286	$1,078,284	$3
PJM Charges - Load	$902,621	$1,088,697	($186,077)
Total - Power Supply	**$5,778,353**	**$5,914,007**	**($135,654)**
Generation			
Plant Operations	$428,108	$445,311	($17,203)
Generation Fuel	$0	$89,542	($89,542)
Capacity Credits	($1,002,527)	($1,002,528)	$0
PJM Credits	($34,012)	($194,319)	$160,307
Total - Generation	**($608,431)**	**($661,994)**	**$53,562**
Emission Allowance Sales			
Total - Emission Allowance Sales	**$0**	**$0**	**$0**
Total Power Supply & Generation	**$5,169,922**	**$5,252,014**	**($82,092)**
Total Power Supply, Generation & Emission Sales	**$5,169,922**	**$5,252,014**	**($82,092)**
Unit Costs			
Total – Power Supply	$98.36	$95.21	$3.15
Total - Generation + Emission Sales	($10.36)	($10.66)	$0.30
Final Cost of Service to City of Dover Ratepayers	**$88.01**	**$84.55**	**$3.45**

	Budget YTD	Actual YTD	Variance YTD
Load Forecast	**685,080**	**696,363**	**(11,282)**
Power Supply			
Power Supply	$43,624,115	$43,394,940	$229,175
Power Supply Management	$2,126,745	$2,115,909	$10,835
Capacity Charges - Load	$11,650,406	$11,650,406	($0)
PJM Charges - Load	$12,147,178	$13,110,533	($963,355)
Total - Power Supply	**$69,548,443**	**$70,271,788**	**($723,345)**
Generation			
Plant Operations	$5,224,239	$5,149,111	$75,128
Generation Fuel	$3,138,177	$3,465,596	($327,419)
Capacity Credits	($10,845,058)	($10,845,059)	$1
PJM Credits	($5,448,591)	($5,880,578)	$431,986
Total - Generation	**($7,931,234)**	**($8,110,930)**	**$179,696**
Emission Allowance Sales			
Total - Emission Allowance Sales	**$11,695**	**$11,695**	**$0**
Total Power Supply & Generation	**$61,617,209**	**$62,160,858**	**($543,650)**
Total Power Supply, Generation & Emission Sales	**$61,628,904**	**$62,172,553**	**($543,650)**
Unit Costs			
Total – Power Supply	$101.52	$100.91	$0.61
Total - Generation + Emission Sales	($11.56)	($11.63)	$0.07
Final Cost of Service to City of Dover Ratepayers	**$89.96**	**$89.28**	**$0.68**

2.2 – VARIANCE ANALYSIS

Power Supply

- Power Supply realized a favorable $48 thousand variance compared to the budget. This favorable variance was primarily due to the timing of Dover's options purchase and payment of the associated premium. During FY2009-10 the City of Dover purchased Options as insurance to protect Dover from incremental energy cost exposure. The current City of Dover power supply and generation budget indicates that 100% of this purchase was expensed as a Power Supply Cost in the FY2009-10 period; however the FY2010-11 budget accrues this expense monthly.

- PJM Charges for Load experienced a negative $186 thousand variance relative to the monthly budget. This variance was driven by Dover's open position, which was 46% higher than budget. A larger volume of open positions, coupled with higher than projected PJM energy open prices, resulted in a total Open Position cost that was $307 thousand greater than budget. Additional factors contributing to the unfavorable variance included i) a $112 thousand unfavorable variance in PJM Ancillary charges and ii) a $27 thousand unfavorable variance in Transmission Loss Refunds. Offsetting these unfavorable variances were a $170 thousand favorable variances in Load Following and a $97 thousand favorable variance in Basis costs.

- For the month the City realized a $138 thousand unfavorable net variance between Power Supply (fixed positions) and PJM Charges for Load (open positions, transmission, etc.). The change in volume resulted in an unfavorable $252 thousand variance, and the change in price resulted in a favorable $114 thousand variance. Hence, all of the unfavorable variance can be attributed to volume changes.

- The Power Supply Management variance is merely an estimate at this point.

Generation

- Plant O&M reported an unfavorable variance of $17 thousand compared to the revised monthly O&M reset Budget of $428 thousand (the overall reset plant budget for FY 2010-11 was approved by the City Council on March, 2011). The timing of electric invoice and higher than expected combustion turbine maintenance resulted in unfavorable variance.

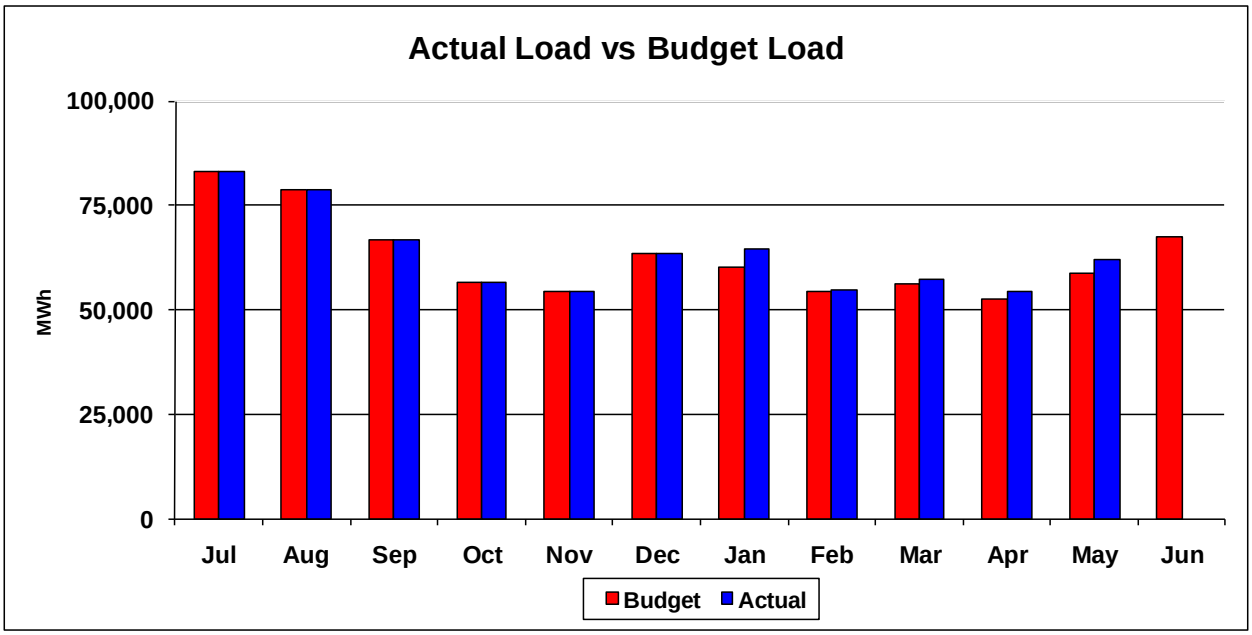
3.0 – ENERGY MANAGEMENT

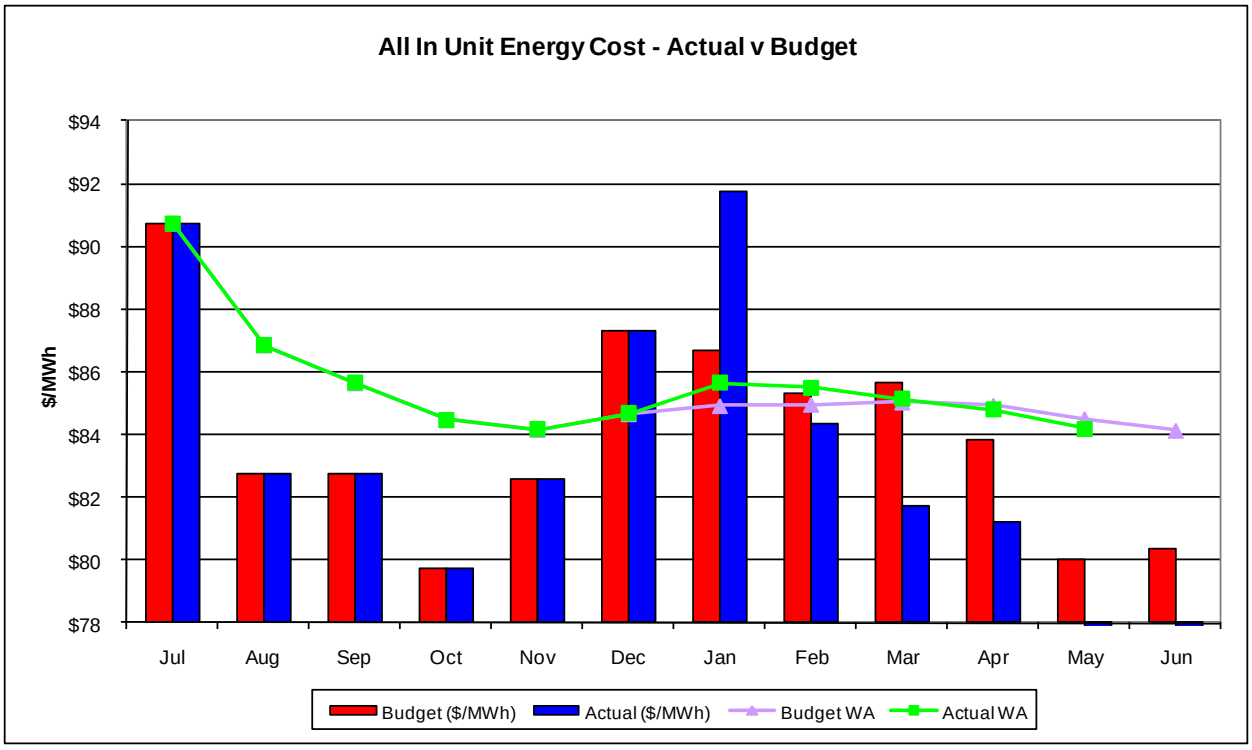
3.1 – PURCHASED POWER

Management Highlights

- Dover's May load was 62,114 MWh, which was 5.7% above the weather normalized load of 58,744 MWh. Hedge volumes accounted for 83% of actual load for the month.

- The May All In Unit Energy cost (excluding capacity) of $77.85 per MWh is $2.16 per MWh lower than the monthly budget.




All In Unit Energy Cost - Actual v Budget
$/MWh
$94
$92
$90
$88
$86
$84
$82
$80
$78
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Budget ($/MWh)
Actual ($/MWh)
Budget WA
Actual WA

Purchased Power Variance Report

	Budget May-11	Actual May-11	Variance May-11
City of Dover Load			
Load Obligation (MWh)	58,744	62,114	(3,370)
Unit Energy Costs ($ per MWh)			
Energy Cost (inc. Load Following & Pace Fees)	$72.78	$69.08	$3.71
Pass Through	$6.30	$7.90	($1.60)
Incentive Fees	$0.93	$0.88	$0.05
Total - All In Unit Energy Cost	**$80.01**	**$77.85**	**$2.16**

Purchased Power Variance Analysis

- The actual Dover load of 62,114 MWh was 5.7% above the projected May load of 58,744 MWh.

- The All In Unit Energy Cost was $2.16 per MWh lower than budget due to a decreased load following and basis charges. Offsetting these positive variances was an increased open position volume and a higher than budgeted energy price, an unfavorable PJM Ancillary charge and a lower than projected transmission related refund.

- The Management Incentive fee variance on a $/MWh basis is merely an estimate at this point.

PJM Power Balancing and Load Related Fees

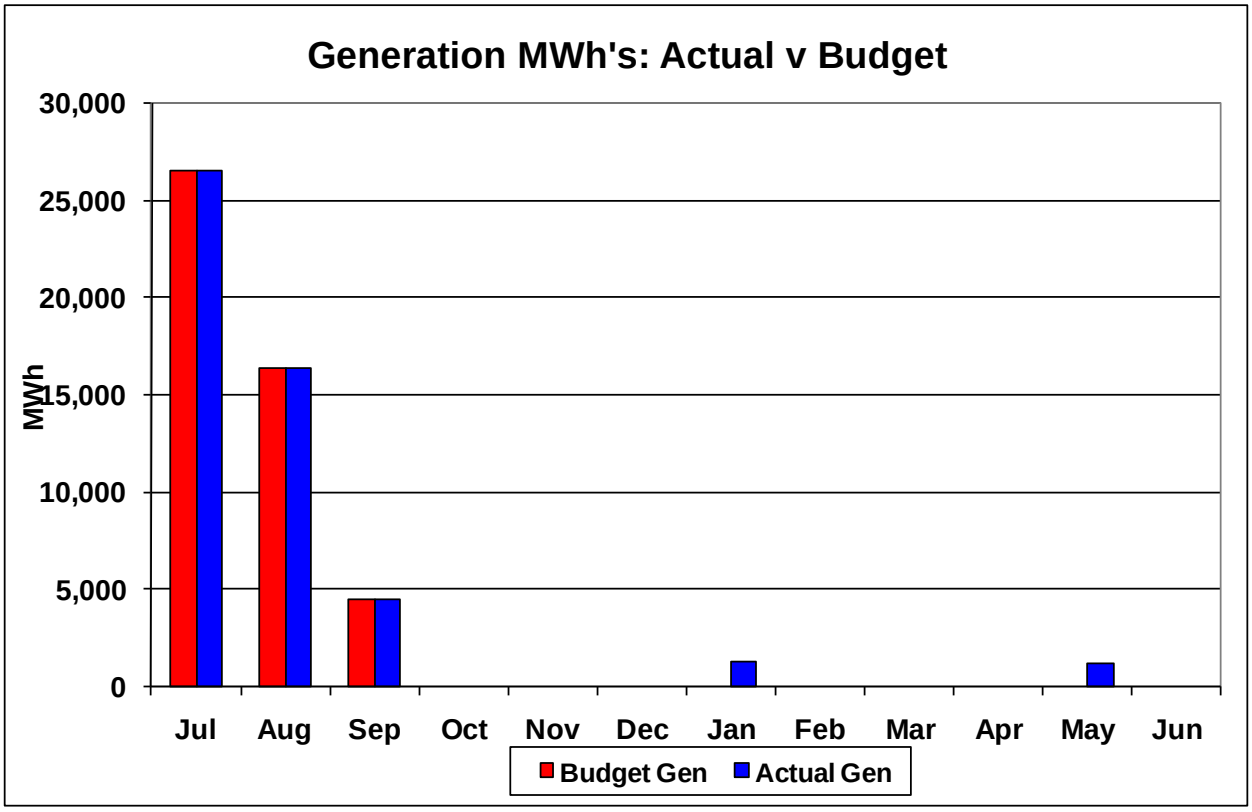
Purchased Power (Hedges): 51,360 MWhs @ $69.33/MWh:	$3,560,754
Power Balancing; Additional PJM, and Energy Manager Fee[4]:	$2,353,253
Total Cost to Serve Load (62,114 MWhs)	$5,914,007
All In $/MWh load cost inclusive of Energy Management Fees:	**$95.21/MWh**

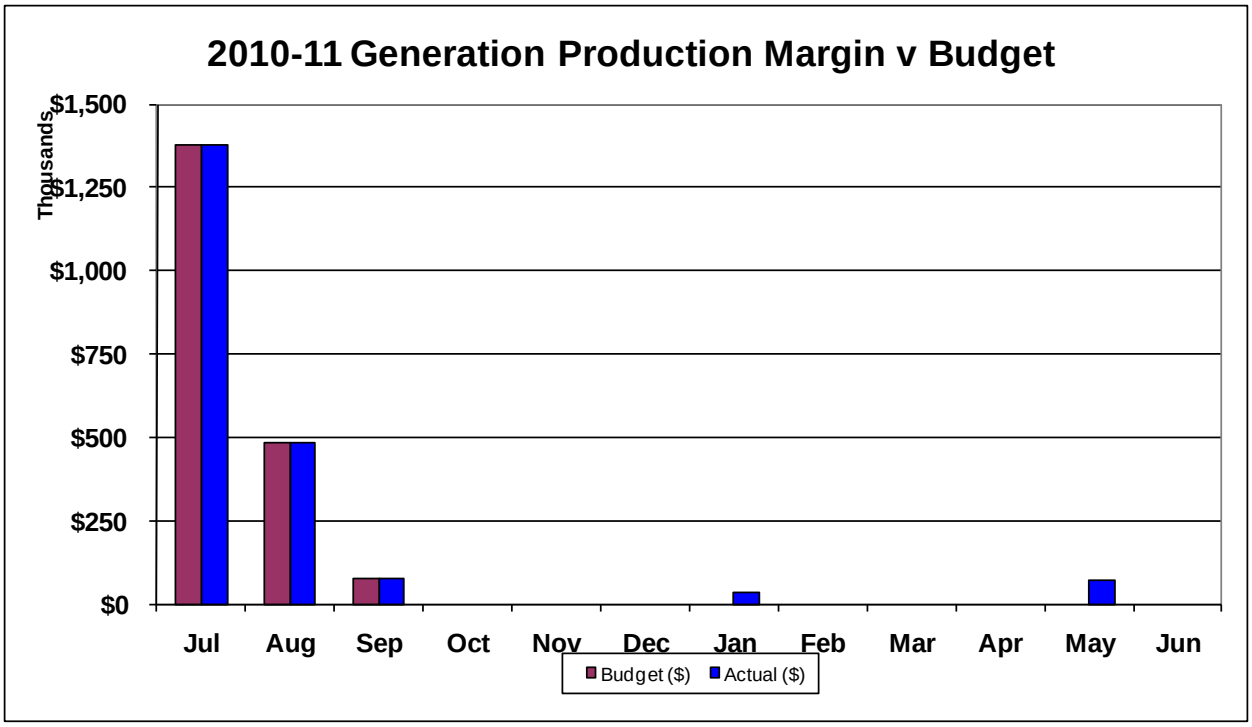
[4] Includes estimated Incentive Fees.

3.2 – GENERATION MANAGEMENT

- PJM dispatched McKee Run Unit 3 and Van Sant Unit 11 on May 31st for 22 hours. Dover's units generated 1,218 MWhs in aggregate for the PJM market and the budget did not expect any generation for the month.

- The McKee units started a planned outage on March 28 that ended on May 23. On May 16, these units performed operational tests consuming 355 dth of natural gas and 754 gallons of fuel oil no.2. The testing fuel costs are expected under EG1112 and EG1113 projects.




2010-11 Generation Production Margin v Budget
Thousands
$1,500
$1,250
$1,000
$750
$500
$250
$0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Budget ($)
Actual ($)

PACE GLOBAL

Generation Management Variance Report

	Budget May-11	Actual May-11	Variance May-11
Self-Supplied Capacity from Gen (MW)			
McKee Run 1	17	17	0
McKee Run 2	17	17	0
McKee Run 3	100.3	100.3	0
Van Sant	39	39	0
Self Supplied Capacity from Gen (MW)	**173.3**	**173.3**	**0**
Additional Capacity from PJM Incremental Auction	**1.7**	**1.7**	**0**
Total Capacity from Gen (MW)	**175**	**175**	**0**
Gen Capacity Sales to PJM ($/MW.d)	$186.12	$186.12	$0.00
Incremental Auction Sales to PJM ($/MW.d)	$50.00	$50.00	$0.00
Power Sales			
Power Sales (MWh)	0	1,218	1,218
Sales Revenue ($ per MWh)	$0.00	($131.51)	$131.51
Power Sales Revenue ($)	**$0**	**($160,118.87)**	**$160,119**
Variable Fuel & Transport			
Fuel Oil No.2 Volume - McKee (gal)	0	0	0
Fuel Oil No.2 - McKee ($/gal)	$0.00	$0.00	$0.00
Fuel Oil No.2 Cost of Goods Sold - McKee ($)	$0	$0.00	$0
Fuel Oil No.2 Volume - Van Sant (gal)	0	0	0
Fuel Oil No.2 - Van Sant ($/gal)	$0.00	0.00	$0.00
Fuel Oil No.2 Cost of Goods Sold - Van Sant ($)	$0.00	0.00	$0.00
Gas Volume (Dth)	0	14,420	(14,420)
Unit Gas Price ($/Dth)	$0.00	$5.48	($5.48)
Variable Gas Cost ($)	$0.00	$78,991.35	($78,991.35)
Transport ($)	$0.00	$10,550.39	($10,550.39)
Variable Gas and Transport Costs ($)	$0.00	$89,541.74	($89,541.74)
Variable Fuel & Transport Costs ($)	**$0.00**	**$89,541.74**	**($89,541.74)**
Testing	$0.00	$0.00	$0.00
Generation Production Margin	**$0.00**	**($70,577.13)**	**$70,577.13**
Generation Capacity Payment			
Total - Generation Capacity Payment	**($1,002,527)**	**($1,002,528)**	**$0**

Generation Management Variance Analysis

Fuel Expense

- PJM dispatched Dover's McKee Run Unit 3 and Van Sant Unit 11 during the month. During that period the units consumed natural gas related to economic power generation. The McKee units also burned natural gas and fuel oil once during the month for operational testing purposes (See "*Fuel and Transportation*" and "*Purchased Commodity Fuel Oil Summary*"). The fuel expenses related to operational testing should be accrued under EG1112 and EG1113 projects.

Generation Production Margin		
Transaction	Volumes	Revenue/(Cost)
PJM Invoice for Power Sold	1,218 MWhs	$160,118.87
Fuel and Transport	14,420 Dth gas/ 0 gal #2 oil 0 gal #2 oil Low Sulfur	($78,991.35)
Generation Production Margin	1,218 MWhs	$70,577.13

The following non-production energy revenues and costs are generally fixed and are not directly related to generation dispatch and power production. Effective September 2009 FERC approved the City of Dover's reactive supply service compensation resulting in approximately $29 thousand of revenue per month.

PJM Invoice (Black Start)	$4,545
Reactive Supply Credit	$29,468
Fuel Oil Tank Heating & Black Start Gas Supply	$0
Eastern Shore Demand Charge	$0
Eastern Shore Transport and Imbalance Charge	$0
Synchronized Reserved Credit	$187
Transco Demand Charge	$0
Non-Production Energy Revenue/(Costs)	$34,200

Fuel and Transportation

- PJM dispatched McKee Unit 3 and Van Sant Unit 11 for total of 22 hours. The following table provides a summary of spot gas purchases during the month:

Date	Volume (Dth)	Price ($/Dth)	Total Commodity Cost ($)
Hess Corp			
16-May	800	$4.65	$3,720.00
17-May	300	$4.55	$1,365.00
30-May	1,500	$5.20	$7,800.00
31-May	9,000	$5.25	$47,250.00
31-May	4,000	$5.50	$22,000.00
Cash-Out	(275)	$4.36	($1,199.00)
Sub-Total	15,325	$5.28	$80,936.00
PESCO			
Sub-Total	0	$0.00	$0.00
NJNG			
Sub-Total	0	$0.00	$0.00
CIPs	(355)	$5.48	($1,944.65)
Total	**14,970**	**$5.28**	**$78,991.35**

- The operational testing fuel expenses, provided below, should be recorded under the appropriate CIPs projects (EG1113 and EG1112).

CIPs	Volume (Dth)	Price ($/Dth)	Total Commodity Cost ($)
EG1113	280	$5.48	$1,533.81
EG1112	75	$5.48	$410.84
Sub-Total	**355**	**$5.48**	**$1,944.65**

Due to the conversion from #6 residual oil to low sulfur #2 oil, the need for a constant supply of natural gas to heat the #6 oil is no longer required. Some gas will still be required for winter space heating of the building(s). Pace will coordinate with NAES on the procurement of such supply. This expense will now fall under the plant's utility costs and be paid and budgeted for by the station.

Gas Transportation Purchased

City of Dover decided not to renew agreements with the Eastern Shore Natural Gas Pipeline ("ESNG") and TransCo to provide firm natural gas deliveries to the McKee Run and Van Sant stations. The City of Dover previously notified ESNG and TransCo of its intent to terminate these existing firm capacity agreements and, as a result, the City no longer pays firm demand charges or adjustments.

ESNG FT Demand Charge	$ 0
TransCo FT Demand Charge	$ 0
Total Purchases	$ 0

Other Gas Purchases

Commodity and transportation imbalances on Eastern Shore Pipeline for the month resulted in no charge. The components of this charge are summarized as follows:

Eastern Shore Transport and Imbalance Charges			
Imbalance/Dth	Estimated Cost/Dth	Estimated Total Cost	
276	$4.78	$1,319.28	
Transport	Volume/Dth	$/Dth	Total Cost
Firm/IT	15,601	$0.5917	$9,231.11
Net Charge	$10,550.39		

Purchased Commodity Fuel Oil Summary

McKee Run Unit 3 and Van Sant Unit 11 were dispatched during the month into PJM consuming natural gas. In addition, McKee units 1 & 2 conducted operational testing purposes on May 17th consuming approximately 754 gal of #2 fuel oil.

The McKee Run tank must maintain 3 days of load equivalent dispatches for its units.

Tank Inventory Estimates as of May 31			
Tank	Tank Capacity (gallon)	Inventory In (gallon)	Days of Burn (Typical Dispatch[5])
McKee Run (#2 Fuel Oil)	2,554,105	451,081	3
Van Sant (#2 Fuel Oil)	258,000	153,043	3

The following table represents fuel oil consumed to test McKee Units 1 & 2. The inventory fuel oil cost of $1,530.62 should be expensed under CIP EG1112 project.

May 2011 Fuel Oil Consumption McKee Run					
Date	#2 Oil Burns / gal	Inventory Price ($/gal)	Market Price ($/gal)	Inventory Cost	Market Cost
17-May	754	$2.03	NA	($1,530.62)	NA
Total	**754**			**($1,530.62)**	

[5] As measured by tank level instruments. Tank levels may change due to oil temperature.

3.3 – EMISSIONS AND ALLOWANCE MANAGEMENT

Given the regulatory uncertainty surrounding the allowance markets, Dover has elected not to include revenues from emission allowance sales in its 2010-2011 fiscal year budget. Dover purchased and retired 53 NO_X seasonal allowances on November 23rd 2010, in order to meet their 2010 NO_X seasonal compliance position. Additionally, Dover purchased 22 NO_X annual allowances on February 11, 2011, in order to cover their 2010 NO_X annual compliance position. In January 2011, Dover was allocated 1,988 SO_2 allowances, 42 NO_X seasonal allowances, and 76 NO_X annual allowances. Dover has the appropriate number of allowances were set aside for retirement (see Exhibit 1).

Exhibit 1: Emissions and Allowance Summary through May 31, 2011

2010-2011 EMISSIONS & ALLOWANCE SUMMARY								
		SO_2			NO_x			
Date	Action	Allowance Allocation	Sale Price	Revenue[1]	Allowance Allocation[2]		Sale Price	Revenue[1]
					Seas.	Ann.		
1/1/08	2007 Carryover	549			0	--	--	--
1/1/09	2008 Carryover	2,691			0			
1/1/09	2009 Allocation	2,723	--	--	53	80	--	--
2/1/10	2010 Allocation	1,988			50	78		
1/1/11	2011 Allocation	1,988			49	76		
4/1/11	2011 Reallocation				2			
N/A	2003-2006 Carryover	139						
9/29/09	SO2 Sales	(1,500)						
11/12/09	NO_X Ann. Sales					(45)		
11/13/09	SO2 Sales	(1,410)						
11/20/09	NOx Seas. Sales				(25)			
12/31/09	2009 YTD Emissions[3]	(1)	--	--	(6)	(13)	--	--
12/31/10	2010 YTD Emissions	--	--	--	(54)	(54)	--	--
10/31/10	EPA Linearity Testing Req.				(68)	(68)		
2011	2010 Deficit NOx Purchases				53	22		
12/31/11	2011 YTD Emissions	(2)			(2)	(4)		
Totals - Allowances		**3,189 pre-CAIR 3,976 CAIR[3]**	**--**	**$0**	**52**	**72**	**--**	**$0**

$0
$0
Total Revenue **$0**

Notes:

(1) Revenue calculations account for a $.50/ton broker fee for SO_2, $10/ton broker fee for NO_x annual and $5/ton broker fee for NO_X seasonal.

(2) Per the Clean Air Interstate Rule, in 2009, NOx emissions will be governed by a seasonal and annual program. The NO_x seasonal emissions pertain only to emissions (May 1 – Sep 30), similar to the previous trading regimen. Annual emissions cover the entire year.

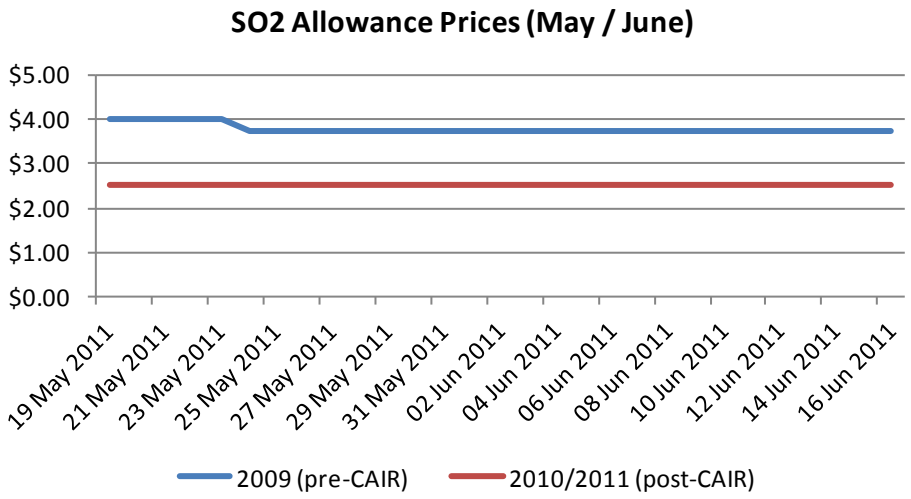
(3) CAIR allowances are retired at a rate of 2 allowances for each ton emitted. Pre-CAIR allowances retain a 1 allowance to 1 ton value for compliance. It is assumed that pre-CAIR allowances will be retired before CAIR allowances.

Given current dispatch expectations, the market value of the remaining 2007-2011 Dover allowance inventory is approximately $36,848.75 at the time of this report. This represents 3,189 pre-CAIR SO_2 allowances trading at $3.75/ton, 3976 post-CAIR SO_2 allowances trading at $2.50/ton, 72 NO_x annual allowances trading at $195/ton, and 52 NO_x seasonal allowances trading at $17.50/ton.

SO_2

Existing SO_2 allowances continue to have little value as the market awaits the release of the final version of the Environmental Protection Agency's (EPA) Clean Air Transport Rule (Transport Rule). See Figure 1 – SO2 Prices. With an ample bank of existing SO_2 allowances in the market and the expectation that the final Transport Rule will require covered facilities to hold and retire SO_2 compliance instruments issued under the new program, prices for current vintage or older allowances are expected to remain very low.

Figure 1 – SO_2 Prices since Last Monthly Report



NO_x

NO_X annual allowance prices rebounded some in the wake of high temperatures in late May and early June (See Figure 2 – NOX Annual Prices since Last Monthly Report.) A hot 2010 summer helped push NO_X annual prices near $550/ton. A similarly hot summer this year could place some upward pressure on NO_X annual pricing. With that said, as with SO_2 allowances, if the Transport Rule implements as expected in 2012, NO_X allowances will have no value beyond meeting 2011 compliance requirements. With no incentive to bank allowances, it is unlikely that

NO_X annual allowances will increase much above current levels, unless generators have vastly underestimated their compliance needs for 2011.

NO_X seasonal allowances lost some value over last month. Allowances continue to trade in low volumes and around $20/ton (See Figure 3 – NOX 2011.) As with NO_X annual and SO_2 allowances, new trading rules under the Transport Rule are unlikely to allow current vintage NO_X seasonal allowances to qualify for compliance.

Figure 2 – NO_X Annual Prices since Last Monthly Report

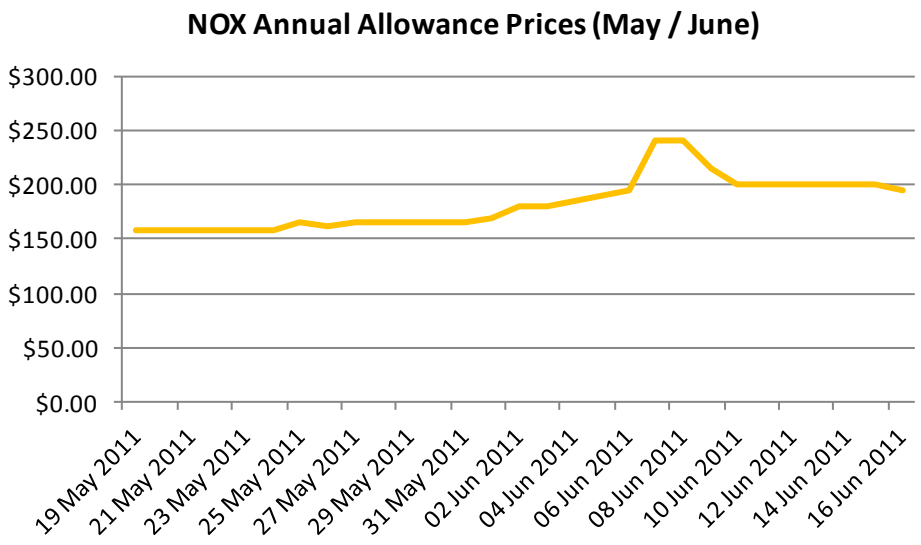
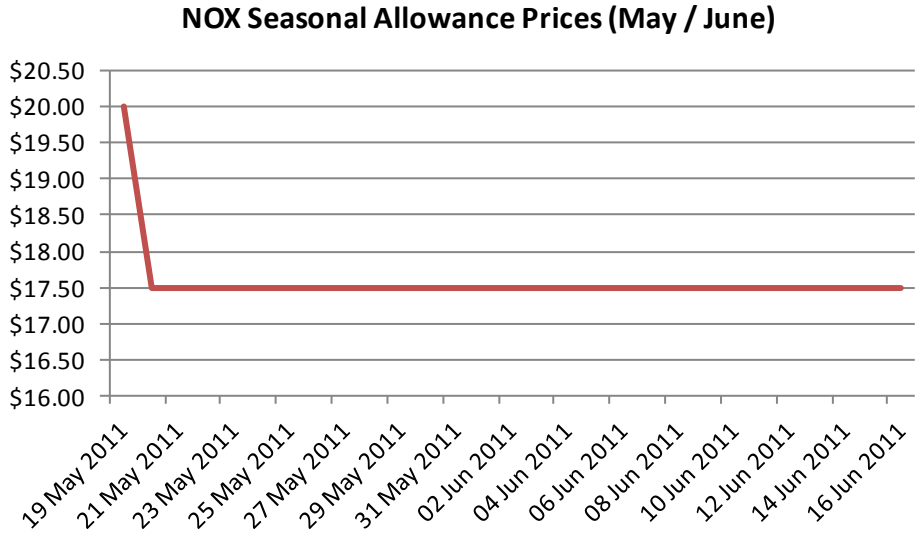


Figure 3 – NO_X Annual Prices since Last Monthly Report



SO_2 and NOx Outlook

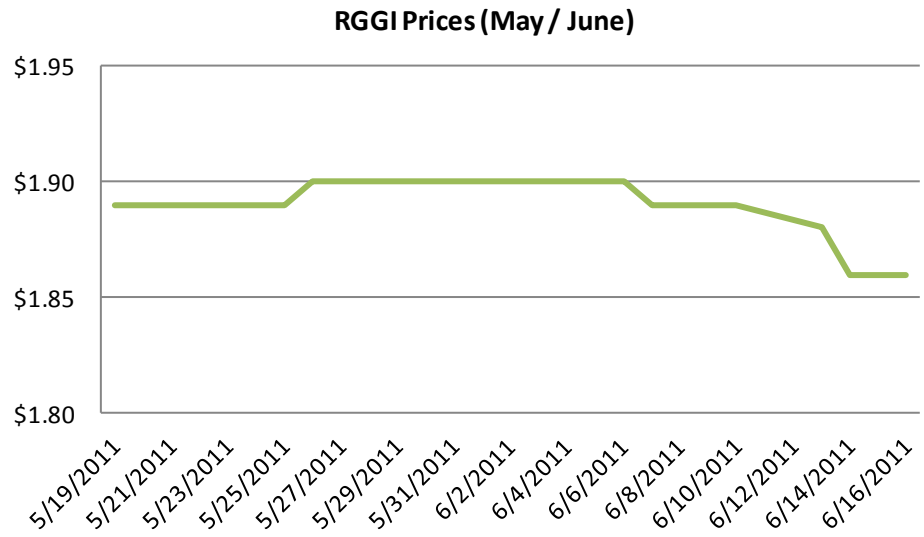
The final Transport Rule, setting new emissions trading rules, is expected to be released in June or July and implemented in January 2012. The expectation is that there will be new allowances for SO_2 and NO_X emissions, leaving little value for the existing bank of allowances beyond this year's compliance requirements. It is difficult to estimate what the future compliance costs for SO_2 and NO_X emissions will be under new trading rules with a number of variables still unknown - the release of the final Transport Rule should provide some clarity.

Senator Tom Carper (D-Delaware), one of the key proponents of a "legislative fix" to the SO_2 and NO_X market rules, announced this month that he will not pursue passing a multi-pollutant in this Congress. While there remain some proposals in the House of Representatives to delay EPA implementation of various air pollution rules, expectation is that legislation impacting these markets will not be enacted this year or next. With that, EPA's Transport Rule will likely be the regulatory mechanism moving forward, although there remains the possibility that lawsuits filed after the final rule is released could delay implementation.

RGGI and Federal Carbon Outlook

RGGI allowance prices continue to price at very low levels, as the market is substantially over supplied, forcing prices to levels at or near the statutory price floor (see Figure 4 – RGGI Allowance Prices).

Figure 4 – RGGI Allowance Prices since Last Monthly Report



The big news in RGGI has been the announcement from New Jersey Governor Chris Christie that the state will withdraw from RGGI at the end of this year. The announcement is not expected to have an enormous impact on the market, but could be an impetus for other states to

follow suit. Although currently there are no expectations of other states exiting the program as New Hampshire, Delaware, and Maine have all recently voted down similar efforts to withdraw from RGGI and New York, Maryland, and Massachusetts, the three largest members in terms of emissions, remain committed to the program.

RGGI program administrators are meeting to review program rules as part of their 2012 Comprehensive Review process. With the program over allocated, the major issue is whether anything can be done to lower the cap or limit the amount the existing bank can qualify for compliance. If the program continues with the existing planned caps and banked allowances are permitted for compliance at full value, RGGI allowances are likely to remain near current levels for the next several years.

In Congress, there has been little movement or discussion on climate legislation nor is any expected through 2012. EPA will remain the primary driver at the federal level, although has recently announced that they will delay the release of proposed GHG emission limits for power plants, which were originally scheduled to be released this July. Proposed rules are now expected in September, although EPA maintains that final rules will be released in May 2012, as scheduled.

4.0 – OPERATIONS MANAGEMENT

Management Highlights

- During the month of May, there were no restricted work days or lost time accidents. The facility has now gone 229 days without an OSHA recordable accident or a lost time reportable accident. Three Near Misses were recorded for the month.

- The plant received no Notice of Violations (NOVs). There was one environmental deviation on the amount of dissolved solids (TDS) going to the outfall. There were three opacity deviations that resulted from testing the updated controls while combusting #2 fuel oil on Unit 1.

- The Units 1, 2, and 3 planned outages were cleared on Monday May 23 at 0600 hours.

- Unit 11 was dispatched by PJM on May 30 but then the dispatch was cancelled later by PJM. The unit was dispatched on the following day and ran for 8.216 hours. Unit 3 was dispatched on May 31and ran for 13.750 hours. Units 1 and 2 were available but never dispatched.

- On May 18, the modifications to the Unit 3 Burner Management System were tested and eventually the test was successful and the system deemed operational.

- On May 17th, Erik Petty received a NAES Service Recognition Award from Vincent Scire, Plant Manager, in recognition of completing 10 years of service working at the City of Dover Generating Facilities.

- The following is the NAES Monthly Report as submitted to PGAM.

NAES Corporation
Dover, Delaware

May 2011
Monthly Report



Erik Petty (left), Operator II, is shown being presented the NAES Service Recognition Award by Vincent Scire, Plant Manager, in recognition of completing 10 years of service working at the City of Dover Generating Facilities. Mr. Petty also received a commemorative polo shirt for passing the PJM System Operator Certification exam.

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7.0 Summary of NAES Performance

1.0 Environmental, Health and Safety:

During the month of May, there were no restricted work days or lost time accidents. The facility has now gone 229 days without an OSHA recordable accident or a lost time reportable accident.

Three Near Misses were recorded for the month. 1) A LO/TO procedure to replace a valve on the caustic system in the VanSant DI was not effectively isolated due to water pressure still remaining on the line as the valve was in the process of being removed. 2) Upon startup, Unit 3 experienced low vacuum. An immediate investigation found that the exhaust hood cover plate was not completely tightened. 3) Scaffold erected to gain access to the Unit 3 expansion joint and ductwork combusted due to exposure to heat emitting from the air heater top guide bearing area during a unit dispatch. Wood planking had been installed directly over the air heater which then got hot and began to smolder. The flames were put out with an extinguisher and the planking was removed.

The plant received no Notice of Violations (NOVs). There was one environmental deviation on the amount of dissolved solids (TDS) going to the outfall. There were three opacity deviations that resulted from testing the updated controls while combusting #2 fuel oil on Unit 1.

Environmental, Health and Safety Statistics		
	Month (May)	Fiscal Year to Date (7/1/10-6/30/11)
NOVs	0	0
Opacity Deviations	3	16
Environmental Deviations	1	1
OSHA Recordable	0	1
OSHA LTA's	0	0
First Aid cases	0	0
Restricted Workday Accident	0	0
Near Miss	3	9
Man Hours Worked	4,062.00	99,227.50
Date last OSHA Recordable		10/14/10
Date last Lost Time Accident		10/14/10
Days since last OSHA recordable		198
Days since last Lost Time Accident		198

Emissions (NOx & SO2) All data thru 5/31/11

NOx Summary - Year (May-Sept.)Tons					
Year	*Unit #1*	*Unit #2*	*Unit #3*	*Unit #11*	*TOTAL*
2009	0.9	0.7	4.2	0.6	6.4
2010	0.7	2.2	119.2	3.3	125.4
2011	0.0	0.0	1.4	0.2	1.6

NOx Summary - Year (Jan. – Dec.)Tons					
Year	*Unit #1*	*Unit #2*	*Unit #3*	*Unit #11*	*TOTAL*
2009	0.9	0.7	10.1	0.6	12.3
2010	0.7	2.2	119.2	3.3	125.4
2011	0.0	0.0	2.6	1.7	4.3

	CAIR NOx Allowances Summary*						
CAIR NOx Allowance Vintage	**CAIR NOx Allowances Sold YTD**	**NOx Allowances Available (Per Facility, Prior to Sale)**		**Total NOx Tons Emitted (Yr/ Season)**	**CAIR NOx Allowances Purchased YTD**	**NOx Allowance Balance**	
		McKee Run (Yr/Season)	***Van Sant (Yr/Season)***			***McKee Run (Yr/Season)***	***Van Sant (Yr/Season)***
2009	45/25	75/50	5/3	12/5 - 1/1	0/0 – 0/0	18/0	4/2
2010	0	73/47*	5/3	119**/119** - 3/3	22##/53# – 0/0	-46/0	2/0
2011	0	71/48###	5/3	3/1 – 2/0	0/0 - 0/0	68/47###	3/3

Note ** - Higher NOx emissions are attributed to data substitution rules that use significantly higher emission rates than actually were emitted. The implementation of the data substitution rules were caused by performing a linearity test outside the grace period. NAES ESS was able to provide assistance in reducing the NOx emissions from 137 tons to 119 tons since the October report. A petition to the EPA was sent out in February that would result in a reduction in reported emissions. The EPA has given preliminary approval to the petition request although it is not official until the plant receives a signed EPA approval. Until the issue is resolved, the EPA has locked the annual account and no allowances will be deducted until that time.
Note# - 53 tons were purchased to help compensate for the shortage in seasonal NOx allowances.
Note## - 22 tons were purchased to help compensate for the shortage in annual NOx allowances.
Note###- 2 tons were reallocated by the EPA to the McKee Run 2011 account.

SO_2 Summary - Year (Jan.-Dec.)Tons					
Year	*Unit #1*	*Unit #2*	*Unit #3*	*Unit #11*	*TOTAL*
2009	0.05	0.05	0.1	0.2	0.4
2010	0.0	0.0	0.3	0.0	0.3
2011	0.0	0.0	0.1	0.5	0.6

Note: Data is as of 5/31/2011

SO_2 Allowances Summary					
SO_2 Allowance Vintage	SO_2 Allowances Sold - YTD	SO_2 Allowances Available (Per Unit, Prior to Sale & Reconciliation)		Total SO_2 Tons Emitted – U3 and U11 YTD	SO_2 Allowances Balance
		Unit #3	*Unit #11*		
2003-2006	139	138	1	0	0
2007	2455	2585	138	98	170
2008	2392	2585	138	32	299
2009	0	2585	138	0	2723
2010	0	1850	138	0	1988
2011	0	1850	138	1	1987

Note: Data is as of 5/31/2011

CO2 Allowances Summary*					
CO2 Allowance Vintage	CO2 Allowances Sold YTD	CO2 Allowances Available (Per Facility, Prior to Sale)		Total CO2 Tons Emitted	CO2 Allowance Balance
		McKee Run	*Van Sant*		
2009	0	59,805	1,699	5,796	55,708
2010	0	47,844	1,636	32,971	16,509
2011	0	35,883	1,227	2257	34,853
2012	0	23,922	818	0	24,740
2013	0	11,961	409	0	12,370

Note: All CO2 allowance values are provided by the RGGI CO2 Allowance Tracking System

2.0 Financial

Financial – Current Month

Month –May 2011			
	Actual	Budget	Variance
Personnel	235,236	250,336	15,100
Materials & Supplies	5,682	20,060	14,378
Administrative Expenses	204,393	157,712	(46,681)
Total	**$445,311**	**$428,108**	**(17,203)**

Financial – Fiscal Year to Date

Number of Months - 11			
	Actual	Budget	Variance
Personnel	2,765,473	2,777,373	11,900
Materials & Supplies	227,577	244,701	17,124
Administrative Expenses	2,156,045	2,133,436	(22,609)
Total	**$5,149,095**	**$5,155,510**	**$6,415**

2.1 Variance analysis:

The adjusted (annual reset) budget for May was $428,108. The actual expenses for May were $445,311 for an unfavorable variance of $17,203 or ≈ 4.02%. The variance was due to the following:

PERSONNEL EXPENSES – Lower straight labor, overtime, and labor burdens accounted for a favorable variance of $15,100.

MATERIALS AND SUPPLIES EXPENSES- Lower than budgeted expenses in Medical Supplies, Water Treatment Chemicals, Computer Hardware, and City Building Maintenance contributed to realizing a favorable variance of $14,378.

ADMINISTRATIVE EXPENSES – Higher than budgeted expenses in the areas of Electric (due to billing cycle – both April and May booked in May), Training / Conference / Food, Environmental Expenses, Home Office Labor, Other Equipment /Maintenance , Radio Repairs - Maintenance, and Combustion Turbine Maintenance costs which contributed to an unfavorable variance of $46,681. The majority of the unfavorable variance was due to Electric billing ($43,000 of the $46,681 variance)

The current budget forecast for the current fiscal year is $6,156,900 expensed versus an adjusted budget of $6,163,315 thereby realizing a 99.90%.expense rate.

3.0 Operations

Unit Operations / Outages / Trips

The Units 1, 2, and 3 planned outages were cleared on Monday May 23 at 0600 hours.

Unit 11 was dispatched by PJM on May 30 but then the dispatch was cancelled later by PJM. The unit was started twice and was online for 1.420 hours. The unit would come on line but could not raise load due to a blown fuse which affected the ability of the control system to sense the unit was online. The unit was dispatched on the following day and ran with no further problems for 8.216 hours.

Unit 3 was dispatched on May 31st and ran for 13.750 hours. Units 1 and 2 were available but never dispatched.

Month – May 2011							
		McKee Unit 1	McKee Unit 2	McKee Unit 3	MRS Facility	Van Sant Unit 11	Total All Units
Capacity	MW	17	17	102	136	39	175
On Line Hours	Hrs	0.0	0.0	13.750	13.750	9.636	23.386
Starts	#	0	0	1	1	3	4
Gross Generation	MWh	0.0	0.0	1,021.413	1,021.413	280.167	1,301.580
Net Generation	MWh	0.0	0.0	946.317	946.317	279.942	1,226.259
Total Auxiliaries	MWh	24.378	24.378	244.201	292.957	2.755	295.712
Auxiliaries purchased	MWh	24.378	24.378	169.105	217.861	2.530	220.391
Fuel Gas Used	MMBTU	12.228*	12.228*	11,101.389	11,125.845	3,851.820	14,977.665
Fuel Oil Used	MMBTU	52.177*	52.177*	0.0	104.354*	0.0	104.354*
Fuel Oil Used	Gallons	377.00*	377.00*	0.0	754.00*	0.0	754.00*
Total Fuel	MMBTU	64.405*	64.405*	11,101.389	11,230.199	3,851.820	11,230.199
Net Heat Rate	BTU/KWh	0.0	0.0	11,731	11,731	13,759	12.745
Unit Trips	#	0	0	0	0	0	0
Capacity Factor	%	0.0	0.0	1.35	1.01	0.0	0.78
Availability Factor	%	31.45	31.45	31.45	31.45	100.00	48.59
Commercial Unavailability (CU)	%	0	0	0	0	0	0
Planned Outage Hours	Hours	510.000	510.000	510.000	1,530.000	0.0	1,530.000
Maintenance Outage Hours	Hours	0.0	0.0	0.0	0.0	0.0	0.0
Forced Outage Hours	Hours	0.0	0.0	0.0	0.0	0.0	0.0
Reserve Shutdown Hours	Hours	234.000	234.000	220.250	688.250	734.364	1,422.614
HW Boiler Gas Usage	MMBTU				0		0
Pilot Gas Usage	MMBTU	38,212.500	38,212.500		76,425.000		76,425.000

 # Note: Does not include HWB or Pilot Gas. Fuel usage numbers are taken from fuel flow instruments.
* Indicates testing fuel for Units 1 & 2 for the week of May 16. This testing was to operationally check out the controls modifications made to the burner management system during the Spring outage.

2010-2011 Fiscal Year-to-Date (11 Months)							
		McKee Unit 1	McKee Unit 2	McKee Unit 3	MRS Facility	Van Sant Unit 11	Total All Units
Capacity	MW	17	17	102	136	39	175
On Line Hours	Hrs	13.033	128.966	659.006	801.005	147.426	948.310
Starts	#	1	3	45	49	38	87
Gross Generation	MWh	154.626	1,216.601	46,591.698	47,962.925	4,915.614	52,878.539
Net Generation	MWh	147.111	1,141.623	43,915.013	45,203.747	4,912.183	50,115.930
Total Auxiliaries	MWh	334.847	402.309	5,641.134	6,378.290	44.710	6,423
Auxiliaries purchased	MWh	327.332	327.332	2,847.249	3,501.913	41.250	3,543.163
Fuel Gas Used	MMBTU	2,195.478	15,258.078	463,120.226	480,573.782	57,796.096	538,369.878
Fuel Oil Used	MMBTU	52.177	52.177	17,721.260	17,825.614	3,790.097	21,615.711
Fuel Oil Used	Gallons	377.00	377.00	125,088	125,842	27,385	153,227
Total Fuel	MMBTU	2,247.655	15,310.255	480,841.486	498,399.396	65,175.489	563,574.885
Net Heat Rate	BTU/KWh	14,841	13,355	11,700	13,299	13,476	13,388
Unit Trips	#	1	0	3	4	3	7
Capacity Factor	%	0.11	0.84	5.26	4.07	1.48	3.35
Availability Factor	%	59.88	67.10	67.02	64.67	96.92	72.73
Commercial Unavailability (CU)	%	6.6	0	0.03*	0.85	0	0.66
Planned Outage Hours	Hours	2,645.500	2,645.500	2,645.500	7,936.500	247.317	10,829.317
Maintenance Outage Hours	Hours	0.0	0.0	0.0	0.0	5.433	5.433
Forced Outage Hours	Hours	579.830	0	6.317	586.15	0	586.15
Reserve Shutdown Hours	Hours	4,814.670	5,265.534	4,800.393	14,880.597	7,639.820	22,520.417
HW Boiler Gas Usage	MMBTU				4,816.910		4,816.910
Pilot Gas Usage	MMBTU	38,212.500	38,212.500		76,425.000		76,425.000

Note: * Calculation does not include 3.317 hours that were Outside Management Control (OMC)

Fuel Oil Inventory							
	Monthly Inventory (Start)	Monthly Inventory (End)	Fuel Purchases (Month)	Monthly Inventory (Change)	FY 10-11 Inventory (Start)	Fuel Purchases (YTD)	FY 10-11 Inventory (Change)
McKee Run (#2 Fuel Oil)	451,200	452,081	0	881	448,556	118,549	3,525
Van Sant (#2 Fuel Oil)	152,369	153,043	0	674	143,099	38,079	9,944

Note: As measured by tank level instruments. Tank levels may change due to oil temperature.

Van Sant Lifetime through 5/31/11			
	Actual Starts	Factored Starts	Fired Hours
Van Sant	1256	2169.15	4120.76
Since HGP - Dec 2004	203	501.45	737.18

Team Report:

On May 18, the modifications to the Unit 3 Burner Management System were tested by putting different natural gas burners in service then tripping burners to test to determine which gas valves would trip and compare with the ladder logic. After going through all nine burners, the test was successful and the system deemed operational. The testing was done without putting the unit on line.

Operations personnel provided support to maintenance by working on Preventative Maintenance (PM) work orders or other work orders that they have the necessary skills to complete successfully. The Operations Department continues to utilize the Flex Team in both Operations and Maintenance areas to help in maintaining the plant.

Capacity Testing – FY 2010-2011					
Summer 2010 (June 1- Aug 31)			**Winter 2010-2011 (Dec 1- Mar 1)**		
Unit	Rated Net Capability (MW)	Reported Net Capability (MW)	Unit	Rated Net Capability (MW)	Reported Net Capability (MW)
1	17	17.20	1	17	*
2	17	18.09	2	17	*
3	102	102.68	3	102	105.61
Van Sant	39	39.30	11	39	43.833
Total	175	178.67	Total	175	149.443

4.0 Maintenance

During the month of May, plant maintenance staff continued addressing the backlog of work orders. There were forty-five work orders issued with sixty-seven work orders being completed during the month.

The table below summarizes the monthly work order activities.

Work Order Report

May - 10

Priority #	Outstanding From Previous Months	Issued This Month	Completed This Month	Outstanding at the end of the month
1	9	3	5	7
2	27	4	7	24
3	35	16	13	38
4	35	0	1	34
5	10	0	7	3
SW1	0	0	0	0
SW2	0	0	0	0
SW3	0	0	0	0
SW4	0	0	0	0
SW5	0	0	0	0
PM	49	22	34	37
Totals	165	45	67	143

Note: PM's are included in the priority totals

Notable activities during the month include:

1) Maintenance, IC&E and Operations Staff completed the Unit 3 natural gas piping purge utilizing the NAES SMP-22 gas purge procedure. Safe removal of natural gas from the piping with a nitrogen purge was completed. The mechanical contractor removed three sections of piping and installed three new burner level gas trip valves. The ICE technicians completed the electrical connections in preparation for making the system operational.

2) Maintenance mechanical staff completed eight weeks of outage work at the McKee Run Generating Station. Annual inspections and preventive maintenance activities were completed on Unit 3. Work activities included the replacement of the supply and return oil piping and isolation valves on Units 1 and2 boiler fronts. The new valves had limit switches installed for control feedback.

3) IC&E staff investigated a problem with VanSant not being able to increase load after being synchronized to the system grid. The PLC and generator breaker was checked. Two fuses were found blown in the FU 1 block of the control cab. The Unit was started and able to pick up load as normal.

4) IC&E staff completed eight weeks of outage work at McKee Run Generating Station. Units 1 and 2 outage work assigned to them included the installation of new control cabinets, LED lights, conduit and wiring for the controls modifications intended to bring the units into compliance with NFPA guidelines.

5.0 Capital Improvement Projects (CIP)

Project Number	Description	Update
EG1101	Unit 3 Cooling Tower Life Extension	Progress: No other work is planned for this project during the remainder of the fiscal year. Schedule: Work scope development for next year will commence in April 2011.
EG1102	Units 1 & 2 Cooling Tower Life Extension	Progress: The scope of work on the lower, lower decking support and stairways improvement was completed in May. Tower casing is being replaced post outage and has no effect on unit operation. Schedule: Work will be completed by the end of June 2011.
EG1103	Unit 3 Turbine Inspection	Progress: Started on the development of the project work scope documents. Schedule: This project has been deferred until 2011-2012 fiscal year.
EG1104	Unit 3 Aux System Components	Progress: Started on the development of the project work scope documents. Schedule: Deferred until 2011-2012 fiscal year.
EG1105	Miscellaneous Capital Equipment Replacements	Progress: This project is for the unexpected capital costs due to equipment failure. Schedule: Funds to date have been used to cover the cost of the Unit 3 600-lb steam station valve repairs, Unit 3 Cooling Water Booster Pump Repairs and circuit breakers.
EG1106	Unit 3 Stack Repairs	Progress: Started on the development of the project work scope document. Schedule: Deferred until 2011-2012 fiscal year.
EG1107	Units 1 & 2 Life Extension	Progress: The planned work was scheduled to be completed in early May. Schedule: The work was completed in May. Other work has been scheduled for the 2011-2012 fiscal year.
EG1108	Unit 1 Forced Outage Repairs	Progress: The repair work has been completed. Schedule: This work is complete.
EG1109	Unit 3 FD & ID Fan Damper Upgrade	Progress: Started on the development of the project work scope documents. Schedule: Deferred until 2011-2012 fiscal year.
EG1110	Unit 3 DCS Computers & Software Upgrades	Progress: Started on the development of the project work scope documents. Schedule: Deferred until 2011-2012 fiscal year.
EG1111	Unit 2 Boiler Inspections and Repairs	Progress: Inspections and other repairs were completed during the Fall 2010 Outage. Schedule: Miscellaneous work is being wrapped up to complete the project.

EG1112	Unit 3 Air Heater Expansion Joint	Progress: The work was completed on the expansion joint in May. Insulation and lagging reinstallation will commence in June 2011 Schedule: The work will be completed by the end of June 2011
EG1113	Units 1 & 2 Controls Modifications	Progress: The work was completed and tested the week of May 16. Schedule: Final installation of the control system wiring and system checkout and testing was completed on May 20.
EG1114	Unit 3 Gas Line Modifications	Progress: The gas line was successfully purged and the gas lines were cut for each deck and new gas valves were installed. Testing was completed on May 18. Schedule: The work was completed and tested on May 18.

5.1 CIP Budget

Project Number	Description	Approved Budget ($ X 1000)	Latest Estimate ($ X 1000)
EG1101	Unit 3 Cooling Tower Life Extension	398	372
EG1102	Units 1 & 2 Cooling Tower Life Extension	173	90
EG1103	Unit 3 Turbine Inspection	348	348
EG1104	Unit 3 Aux System Components	188	188
EG1105	Miscellaneous Capital Equipment Replacements	77	66
EG1106	Unit 3 Stack Repairs	25	25
EG1107	Units 1 & 2 Life Extension	225	225
EG1108	Unit 1 Forced Outage Repairs	412**	424
EG1109	Unit 3 FD & ID Fan Damper Upgrade	45	45
EG1110	Unit 3 DCS Computers & Software Upgrades	30	30
EG1111	Unit 2 Boiler Inspections and Repairs	124##	111
EG1112	Unit 3 Air Heater Expansion Joint	65##	75
EG1113	Units 1 & 2 Controls Modifications	150##	150
EG1114	Unit 3 Gas Line Modifications	60##	40

** This project was not budgeted for 2011.
Project was not in original FY11 CIP but was approved by COD Council in late 2010.

6.0 General Plant Information

Training:

CEMS training was completed at VanSant for the Operations staff to allow checks to be completed on a daily basis by operators. VanSant is a remote site that is three miles away from McKee Run. Completing the daily checks by operators will provide consistency in work tasks and aid in ensuring tasks are completed in a timely manner.

Training of all plant employees was held in May to educate them on being able to recognize Arc Flash Levels as well as identifying the applicable PPE to ensure their personal safety and the safety of others who may be in the arc flash exposure area. Subsequent to the training, the plant's uniform policy has been revised to reflect the new safety standards.

Plant employees continue General Physics safety training and environmental courses to enhance their overall knowledge of permit and safety requirements. As the GPI courses are being completed the employee reviews the standard operating procedure (SMP) for the same topic they are training on to review NAES policy as well.

Used Oil training was conducted to familiarize employees with a plan revision and subsequent operational changes.

Personnel:

On May 13th, Erik Petty successfully passed the PJM System Operator Certification exam. Mr. Petty received a shirt to commemorate his achievement for passing the PJM Operator exam.

On May 17th, Erik Petty received a NAES Service Recognition Award from Vincent Scire, Plant Manager, in recognition of completing 10 years of service working at the City of Dover Generating Facilities.

Calendar of Events	Date
Units 1, 2, and 3 Spring Outage	March 28, 2011 – May 23, 3011
NOx Ozone Season Starts	May 1, 2011
EIA-923 Report	May 6, 2011
VanSant 5 Year SPCC Plan Recertification	June 27, 2011
Fiscal Year 2010-2011 Ends	June 30, 2011
PJM Summer Capacity Test Period	June 1, 2011- August 31, 2011
Toxic Release Inventory (TRI) Annual Report	July 1, 2011
Unit 3 RATA Testing	July 12, 2011
McKee Run and VanSant Title V Semi-Annual Certification Due	August 1, 2011
NOx Ozone Season Ends	September 30, 2011
One Year Accident Free	October 14, 2011
Units 1, 2, 3 and 11 Fall Outage	TBD
Winter Capacity Period	December 1, 2011 to February 28, 2012
McKee Run and VanSant Title V Annual Certification Due	February 1, 2012
NOx Emissions Reconciliation Due	March 1, 2012
SO2 Emissions Reconciliation Due	March 1, 2012
SARA III Report	March 1, 2012
Annual VanSant Black Start Test	March , 2012
Units 1, 2, 3 and 11 Spring Outage	TBD
Air Emission Inventory	April 1, 2012
McKee Run Title V Permit Renewal	April 20, 2012
EIA-860 Report	April 29, 2011

7.0 Summary of NAES Performance to Date

Plant Performance FY 2010-2011						
Measure	Month		Year to Date		YTD Incentive	FY Maximum Incentive
Commercial Unavailability (CU)	0%		0.66%		$63,262	$89,586
Safety	1		1		$8,398	$16,797
Environmental	0		0		$16,797	$16,797
Capacity Tests Completed	Summer	Winter	Summer	Winter		
Unit 1	No	No	Yes	Yes*	$3,360	$3,360
Unit 2	No	No	Yes	Yes*	$3,360	$3,360
Unit 3	No	No	Yes	Yes	$20,157	$20,157
Unit 11	No	No	Yes	Yes	$6,719	$6,719
Total YTD Incentive %	77.85%		***Total YTD Incentive***		$122,052	$156,775

Note - * Unit did not operate in the Winter period and was in the PJM Winter Capacity Test Exemption Program.

APPENDICES

I. PJM INVOICE BREAKDOWN

The PJM bill is a record of all Electricity Transactions, Transmission Services, Ancillary Services and Miscellaneous fees that allow the PJM to operate. Below is a list of the line items on the PJM bill including all generator activity.

PJM Bill Line Items	Gen	Load	Net
Day Ahead Energy	$130,982.16	($662,397.52)	($531,415.36)
Realtime Energy	$15,685.56	$23,159.05	$38,844.61
Transmission Losses Credits	$0.00	$41,068.93	$41,068.93
Network Integration Transmission Service Charges	$0.00	($265,765.79)	($265,765.79)
Inadvertent Interchange Charges	$0.00	($3,430.94)	($3,430.94)
Regulation Charges	$0.00	($28,221.88)	($28,221.88)
Synchronized Reserve Charges	$0.00	($14,518.49)	($14,518.49)
Balancing Operating Reserves Charges	$0.00	($11,935.81)	($11,935.81)
Day Ahead Operating Reserves Charges	$0.00	($12,520.24)	($12,520.24)
Day-ahead Scheduling Reserve	$0.00	$126.91	$126.91
Synchronous Condensing Charges	$0.00	($46.96)	($46.96)
Reactive Services Charges	$0.00	($107,290.04)	($107,290.04)
Meter Correction Charges	$0.00	($4,678.40)	($4,678.40)
Day-ahead Operating Reserve for Load Response	$0.00	$0.00	$0.00
Balancing Operating Reserve for Load Response	$0.00	$0.00	$0.00
Balancing Operating Reserves Credits	$13,451.15	$0.00	$13,451.15
Day Ahead Operating Reserves Credits	$0.00	$0.00	$0.00
Locational Reliability Charges	$0.00	($1,080,033.18)	($1,080,033.18)
Capacity Transfer Rights Credits	$0.00	$1,745.61	$1,745.61
Capacity Resource Deficiency Credits	$0.00	$4.03	$4.03
Demand Response and ILR Compliance Penalty Credits	$0.00	$0.00	$0.00
RPM Auction Credits	$1,002,527.60	$0.00	$1,002,527.60
Auction Revenue Rights Credits	$0.00	$31,448.26	$31,448.26
Synchronized Reserve Credits	$187.72	$0.00	$187.72
PJM Scheduling System Control and Dispatch Service Charges	$0.00	($15,851.78)	($15,851.78)
Transmission Owner Scheduling System Control and Dispatch Service Charges	$0.00	($4,708.54)	($4,708.54)
Reactive Supply and Voltage Control from Generation Sources Service Charges	$0.00	($31,898.48)	($31,898.48)
Reactive Supply Credit	$29,467.58	$0.00	$29,467.58
Black Start Service Charges	$0.00	($1,002.01)	($1,002.01)
North American Electric Reliability Corporation (NERC) Charge	$0.00	($551.33)	($551.33)
Reliability First Corporation (RFC) Charges	$0.00	($836.52)	($836.52)
Expansion Cost Recovery Charges	$0.00	($408.58)	($408.58)
Transmission Enhancement Charges	$0.00	($16,003.08)	($16,003.08)
Black Start Service Credits	$4,544.50	$0.00	$4,544.50
Non-Firm Point-to-Point Transmission Service Credits	$0.00	$401.92	$401.92
Generation Deactivation	$0.00	$741.04	$741.04
Market Monitoring Unit (MMU) Funding	$0.00	($326.77)	($326.77)

Organization of PJM States, Inc. (OPSI) Funding	$0.00	($39.28)	($39.28)
FERC Annual Recovery	$0.00	($3,567.86)	($3,567.86)
PJM Annual Membership	$0.00	$0.00	$0.00
EFOR-P	$0.00	$0.00	$0.00
DPL Settlement B	$0.00	($0.18)	($0.18)
PPA	$0.00	$357.13	$357.13
	$1,196,846.27	**($2,166,980.78)**	**($970,134.51)**

II. LOAD, ALL IN ENERGY AND ALL IN COST OF SERVICE TABLE

	Budget Load (MWh)	Actual Load (MWh)	Budget AIE ($/MWh)	Actual AIE ($/MWh)	Actual YTD AIE ($/MWh)	Budget AICS ($/MWh)	Actual AICS ($/MWh)	Actual YTD AICS ($/MWh)
Jul	**83,163**	**83,163**	**$90.72**	**$90.72**	**$90.72**	**$81.36**	**$81.36**	**$81.36**
Aug	**78,755**	**78,755**	**$82.76**	**$82.76**	**$86.85**	**$83.03**	**$83.03**	**$82.17**
Sep	**66,782**	**66,782**	**$82.73**	**$82.73**	**$85.65**	**$91.13**	**$91.13**	**$84.79**
Oct	**56,452**	**56,452**	**$79.72**	**$79.72**	**$84.47**	**$87.24**	**$87.24**	**$85.27**
Nov	**54,396**	**54,396**	**$82.56**	**$82.56**	**$84.17**	**$91.56**	**$91.56**	**$86.28**
Dec	**63,566**	**63,566**	**$87.33**	**$87.33**	**$84.67**	**$98.22**	**$98.22**	**$88.16**
Jan	**60,136**	**64,462**	**$86.66**	**$91.77**	**$85.65**	**$94.36**	**$97.13**	**$89.40**
Feb	**54,199**	**54,900**	**$85.32**	**$84.37**	**$85.51**	**$94.11**	**$92.95**	**$89.77**
Mar	**56,334**	**57,414**	**$85.66**	**$81.75**	**$85.14**	**$93.39**	**$89.70**	**$89.77**
Apr	**52,554**	**54,359**	**$83.85**	**$81.20**	**$84.80**	**$92.99**	**$89.53**	**$89.74**
May	**58,744**	**62,114**	**$80.01**	**$77.85**	**$84.18**	**$87.28**	**$84.55**	**$89.28**
Jun	67,331		$80.51			$96.23		

III. GLOSSARY

Energy Only Unit Cost ("EOU") accounts for the wholesale energy costs **excluding** capacity obligations, capacity credits for Dover-owned generation, generation revenues, generating plant costs, the black start ancillary services credit for the Van Sant plant, and revenues associated with the sale of emission allowances. The AIE includes the costs from settling the hedged or forward transactions; the energy bought on the ISO (Independent System Operator or PJM) day-ahead to cover the open position (un-hedged); load following costs associated with balancing the actual load in the ISO real-time market; energy management service related fees; the ISO transmission charges and credits to load serving entities; the ISO ancillary services charges such as generation regulation, spinning reserve, and reactive power; and the ISO administrative charges and cost of service recovery fees.

All In Cost of Service ("AICS") accounts for the net cost of wholesale power to the City of Dover Electric Utility. The AICS starts with the AIE and adds the costs or credits from capacity obligations, capacity credits for Dover-owned generation, generation revenues, generating plant costs, the black start ancillary services credit for the Van Sant plant, and revenues associated with the sale of emission allowances.

Black Start is a generating ancillary service that is the process of restoring a generating plant to service without the support of an external power supply to power auxiliary equipment needed for start up operations.

Capacity UCAP Obligated Purchased is the obligation and payment by all load serving entities in PJM including Dover for the Unforced Capacity (UCAP) requirement from PJM that satisfies the PJM reserve requirements.

Generation Capacity Credit: is the credit provided to generators for supply capacity to the system. The price is determined by the PJM Reliability Pricing Market auction process that includes three auctions for each capacity year.

Generation Production Margin accounts for the variable margin excluding variable O&M and emissions. The Generation Production Margin is calculated by taking the PJM revenues credited to the plant including any balancing charges or credits less the fuel costs. Generation Production Margin includes both "Economic and reliability dispatch" and "Testing." Economic and reliability dispatch equals the margin achieved when Dover's generating plants are dispatched by PJM for either economic dispatch (the system energy price is greater than the Dover bid price) or reliability dispatch whereby PJM pays the generating cost of the plants for the hours the plant is run to support the system. Generation Testing equals the Generation Production Margin associated with testing. This is usually expected to be a negative margin because the plant is potentially being dispatched / run when energy prices do not cover its costs.

Non-Production Revenue equals the credits from PJM to Dover for Generation Capacity Credit, the Black Start Revenue and the sales by Dover of Emission Allowances.

FUND SUMMARY

Total Collected	$ 651,183.02
DEMEC Admin Fee Paid	$ 18,312.19
State Admin Fee Paid	$ 13,987.88
Grants Paid	$ 389,412.50
Grants/Fees Reserved and Amount Owed	$ 238,121.75
Energy Depot Paid	$ 31,519.82
Efficiency Programs Paid	$ 34,068.34
*Funds Available	**$ (74,239.46)**

* As of 07/28/2011

GRANTS PAID

Date Grant Paid	Applicant	Type	Grant Amount Paid	Review Fee Paid	Amount Owed
9/21/2007	Laura Drew Kelly	Geo - Res	$ 3,000.00	$ 225.00	$ -
12/5/2007	Domingo Reye	Solar - Res	$ 12,762.50	$ 750.00	$ -
4/16/2008	Lakeland Commercial Group	Geo - Comm	$ 10,800.00	$ 750.00	$ -
6/19/2008 & 08/25/2008	L.D. Shank - Triad Farms	Solar - Comm	$ 30,000.00	$ 750.00	$ -
10/6/2008	City of Dover	Solar - Comm	$ 40,820.00	$ 750.00	$ -
10/21/2008	Robert & Cynthia Hartman	Geo HP- Res	$ 1,800.00	$ 135.00	$ -
10/21/2008	Robert Varipapa	Geo HP- Res	$ 2,400.00	$ 180.00	$ -
2/27/2009	David Jump	Solar - Res	$ 15,000.00	$ 750.00	$ -
2/27/2009	Jakob Seren	Solar - Res	$ 15,000.00	$ 750.00	$ -
2/27/2009	William Sweet	Solar - Res	$ 15,000.00	$ 750.00	$ -
3/31/2009	LD Shank - Triad Farms	Solar WH-Comm	$ 3,000.00	$ 225.00	$ -
3/31/2009	Warren & Joan Seaver	Geo HP- Res	$ 3,000.00	$ 225.00	$ -
4/22/2009	William Sweet	Solar HW	$ 3,000.00	$ 225.00	$ -
4/28/2009	State of DE/DNREC - DE	Solar - Comm	$ 30,000.00	$ 750.00	$ -
4/29/2009	Delaware Primary Care, LLC	Solar - Comm	$ 30,000.00	$ 750.00	$ -
9/11/2009	NCALL	Solar - Comm	$ 30,000.00	$ 750.00	$ -
9/11/2009	D. Brian Beckman	Geo HP- Res	$ 2,000.00	$ 150.00	$ -
9/21/2009	LKSC Dover, LLC Kids Cottage	Solar - Comm	$ 29,925.00	$ 750.00	$ -
10/5/2009	Mark F. Boller	Geo HP- Res	$ 3,000.00	$ 225.00	$ -
10/5/2009	John Welgan	Solar - Res	$ 15,000.00	$ 750.00	$ -
11/4/2009	LKSC Dover, LLC Kids Cottage	Geo - Comm	$ 12,000.00	$ 750.00	$ -
3/25/2010	Minaxi Patel	Solar - Res	$ 15,000.000	$ 750.000	$ -
3/23/2010	J. McGiffin Jr. & K. Doyle	Geo HP- Res	$ 3,000.000	$ 225.000	$ -
5/28/2010	Nancy Warner	Geo HP- Res	$ 1,200.000	$ 90.000	$ -
6/2/2010	David Teel	Geo HP - Res	$ 1,800.000	$ 135.000	$ -
6/2/2010	Dewey J. Barich	Geo HP- Res	$ 2,400.00	$ 180.000	$ -
7/12/2010	Mike & Sharonb Laverty	Solar - Res	$ 5,105.000	$ 382.880	$ -
8/19/2010	James Grilli	Geo HP- Res	$ 1,800.00	$ 135.000	$ -
8/19/2010	Michael Noble	Solar - Res	$ 15,000.000	$ 750.000	$ -
9/17/2010	David Teel	Solar - Res	$ 7,500.000	$ -	$ 562.500
3/8/2011	Michael & Carol Apgar	Solar - Res	$ 7,500.000	$ -	$ 562.500
3/17/2011	Elizabeth Murphey School	Geo HP - Comm	$ 9,200.000	$ -	$ 690.000
5/24/2011	Richard Avant	Geo HP - Res	$ 2,400.000	$ -	$ 180.000

6/23/2011	Charles Messina Plumbing	Solar - Comm	$ 10,000.000	$ -	$ 750.000
		Total	$ 389,412.50	$ 13,987.88	$ 2,745.00

PENDING APPLICATIONS

Date Reserved	Applicant	Type	Grant Reservation
3/20/2009	City of Dover	Geo HP	$ 166,179.25
10/26/2009	Charles Bounds	Geo HP- Res	$ 1,935.000
1/27/2010	Pat's Pizzeria	Solar - Comm	$ 30,750.000
1/17/2011	Pat's Pizzeria	Hot Water - Comm	$ 10,750.000
2/2/2011	Arturo Sanchez	Solar - Res	$ 8,062.500
3/29/2011	Psychiatric Access Central DE	Solar - Comm	$ 13,937.500
7/8/2011	Michael J. Kopp	Geo - Res	$ 2,472.500
7/11/2011	Ruth Ann Piper	Geo - Res	$ 1,290.000
			$ 235,376.75

ENERGY DEPOT FEES

3/3/2008	Start-up Fees	$5,872.50
4/15/2008	Start-up Fees	$1,957.50
4/15/2008	Mar, Apr, May 2008	$1,692.13
7/22/2008	June, July, Aug 2008	$1,692.13
10/10/2008	Sept, Oct, Nov 2008	$1,692.13
1/2/2009	Dec 08, Jan, Feb 2009	$1,692.13
4/3/2008	Mar, Apr, May 2009	$1,692.13
7/1/2009	June, July, Aug 2009	$1,692.13
9/11/2009	Sept, Oct, Nov 2009	$1,692.13
1/4/2010	Dec 09, Jan, Feb 2010	$1,692.13
3/29/2010	Mar, April, May 2010	$1,692.13
6/30/2010	June, July, Aug 2010	$1,692.13
10/4/2010	Sept, Oct, Nov 2010	$1,692.13
1/3/2011	Dec 2010, Jan, Feb 2011	$1,692.13
4/5/2011	Mar, Apr, May 2011	$1,692.13
7/8/2011	June, July, Aug 2011	$1,692.13
	Total Paid	$31,519.82

ENERGY EFFICIENCY CAMPAIGNS/EDUCATION PROGRAMS

10/21/2008	1,500 CFL Campaign & Educational Literature	$5,012.29
12/11/2008	Reimbursement for Green	$3,459.12
3/31/2009	Thermal Imager for Home Audits Program	$5,581.12
1/4/2011	Eco @ Home Energy Conserv. Calendars	$20,015.81
	Total	$34,068.34

ACTION FORM

PROCEEDING Utility Committee
DEPARTMENT OF ORIGIN: City Manager's Office **DATE SUBMITTED**: July 28, 2011
PREPARED BY: Ann Marie Townshend, AICP, Director of Planning & Community Development on behalf of Scott D. Koenig, P.E., Interim City Manager
SUBJECT: Proposed ordinance to prohibit new private shallow wells within the City limits and to clarify that wells for geothermal heating and cooling systems are permitted in accordance with certain criteria.
REFERENCE: Dover Code, Chapter 110 – Utilities, Article III – Water Service, Division 1 – Generally, Section 110-67 – Private Wells
RELATED PROJECT: N/A
REVIEWED BY: Scott D. Koenig, P.E., Interim City Manager; Ron Lunt, Public Utilities Director
EXHIBITS: Draft Ordinance #2011-20
EXPENDITURE REQUIRED: N/A **AMOUNT BUDGETED**:N/A **FUNDING SOURCE (Dept./Page in CIP & Budget)**: N/A
TIMETABLE:
RECOMMENDED ACTION: Staff recommends that the Committee forward the proposed ordinance to City Council for first reading on August 22, 2011 and final reading and City Council Action on September 12, 2011.

BACKGROUND AND ANALYSIS

The proposed ordinance would prohibit new private shallow wells within the City of Dover. This prohibition will protect the water resources of the unconfined aquifer from which the City draws a portion of its water supply, as well as protect the City's Certificate of Public Convenience & Necessity (CPCN). Currently, private shallow wells, for irrigation purposes in particular, are permitted in accordance with certain criteria specified in the ordinance.

Additionally, geothermal technology for heating and cooling is an emerging technology that was not contemplated when this section of the code was implemented. Geothermal systems require well permits from DNREC, although they do not draw water from the ground. The proposed ordinance would clarify that wells associated with the installation of closed loop geothermal systems are permitted within the City of Dover in accordance with specified criteria.

CITY OF DOVER PROPOSED ORDINANCE #2011-20

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF DOVER, IN COUNCIL MET:

That Chapter 110 - Utilities, Article III - Water Service, Division 1 - Generally, Section 110-67 - Private Wells, be amended by deleting text indicated in red strikeout (subsection (b) Shallow wells in its entirety) and inserting text indicated in bold, blue, italics as follows:

Sec. 110-67. Private wells.

(a) When authorized. It shall be unlawful and a nuisance for any person to dig, drill or otherwise excavate any well more than 150 feet below the surface of the ground within the city, or one mile thereof, without the permission of the city council given by resolution. No permission shall be given for a well on any property where a potable water supply is available.

~~(b) *Shallow wells*. Shallow wells may be drilled into and water withdrawn from the unconfined aquifers within the limits of the city, subject to the following:~~

~~(1) All wells shall require a permit from the state department of natural resources and environmental control or other regulatory agency and the approval of the city setting forth construction details, design yield, and withdrawal rates.~~

~~(2) All wells must have the approval of the state board of health or other similar regulatory agency for their intended use.~~

~~(3) A detailed plan showing the well location, well construction, piping plan and connection details shall be submitted with the application.~~

~~(4) All wells shall be metered by an approved device and daily pumping records maintained.~~

~~(5) All water derived from shallow wells shall be used only for boiler makeup, cooling water use, and underground irrigation systems.~~

~~(6) Any revisions, changes or deviations from the original permit must be in the same manner as the original permit.~~

~~(7) There shall be no interconnection with any public water supply, nor shall the shallow well be used as a potable water supply for human consumption.~~

~~(8) Private irrigation systems shall be completely underground, with no connections or outlets that could be used for human consumption. Irrigation shall be by sprinkler heads.~~

(b) *Geothermal wells*. Wells may be drilled for the purpose of the installation of a geothermal heating and cooling system within the limits of the city, subject to the following:

(1) These wells shall not be authorized for withdrawal or injection. They will function as borings, filled with a bentonite grout, with a piping system that acts as a heat exchanger to dissipate/absorb heat from the system to the ground.

(2) There shall be no interconnection with any public water supply, nor shall the geothermal well be used as a potable water supply for human consumption.

(3) No well shall be located within any city right-of-way or utility easement without written authorization from the city manager.

ADOPTED: *

SYNOPSIS

The proposed ordinance would eliminate the allowance of new private shallow wells within the City of Dover, and adds language to clarify that geothermal wells are permitted provided they meet certain criteria.

Actions History

August 8, 2011 - Scheduled for Consideration by the Utility Committee

Draft