UTILITY COMMITTEE

A G E N D A

April 13, 2009 - 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 Tmcdowell@dover.de.us) should you wish to be recognized.

AGENDA ADDITIONS/DELETIONS

1. Capital Improvement Plan (CIP) Review - Public Utilities

2. Energy Block Grant

3. PACE/NAES Monthly Report *(February)*

4. Adjournment by 5:55 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.

ELECTRIC

EXPENDITURES

CATEGORY	TOTAL 5 YEAR COST	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Public Utilities - Electric Eng						
Distribution Feeder Replacement Program	1,887,550	377,510	377,510	377,510	377,510	377,510
Distribution Upgrades	2,500,000	500,000	500,000	500,000	500,000	500,000
Relay Test Equipment	48,795	48,795				
Hot Spot Identification	26,400	26,400				
Mid City Substation	1,488,461	483,000	1,005,461			
Replacement of 69 KV Breakers	283,000	183,000	100,000			
Substation PT & CT Replacement	784,813	260,880	256,218	267,715		
Distribution Capacitors and Controls	620,000	120,000	200,000	100,000	100,000	100,000
Lighting Project and Rehabilitation	250,000	50,000	50,000	50,000	50,000	50,000
Walker Road Overhead Conversion	633,112		350,511	282,601		
Frazier Substation Reliability Upgrade	765,247			155,000	610,247	
College Road to McKee Substation Feeders	307,000			307,000		
Transmission Line Maintenance Program	225,000			75,000	75,000	75,000
69kV Substation Switch Replacement	160,000				80,000	80,000
Horsepond Substation Reliability Upgrade	761,812				170,000	591,812
General Scott Switchgear	544,700					544,700
Subtotal	***11,285,890***	***2,049,585***	***2,839,700***	***2,114,826***	***1,962,757***	***2,319,022***
Public Utilities - Trans and Dist						
New Developments	4,576,108	881,300	897,925	914,881	932,179	949,823
Subtotal	***4,576,108***	***881,300***	***897,925***	***914,881***	***932,179***	***949,823***
Public Utilities - Power Plant						
Miscellaneous Capital Equipment Replacement	433,500	89,000	82,000	84,500	87,500	90,500
McKee Run Unit 1 COMS Replacement	33,000	33,000				
McKee Run Warehouse/Admin Smoke & Heat Detection System	55,000	55,000				
VanSant CT Mark IV Upgrades	700,000	700,000				
Plant Driveway Repaving	240,000	240,000				
Work Management System Replacement	85,000	85,000				
Unit 3 - Remove Cyclone Separators	51,000	51,000				
Unit 1 Remove Cyclone Separataors	36,000	36,000				

Unit 2 - Remove Cyclone Separators	36,000	36,000				
McKee Run - Hot Water Boilers	70,000		70,000			
McKee Run Unit 2 COMS Replacement	33,000		33,000			
McKee Run Units 1 & 2 - Stack Repairs	75,000			75,000		
McKee Run - Demineralizer Replacement	65,000			65,000		
McKee Run Unit #1 Turbine Outage	500,000			500,000		
Preservation of Structures	80,000			38,000		42,000
VanSant Auxiliary Power Backup	75,000				75,000	
McKee Run Unit 3 Turbine Outage	1,000,000					1,000,000
McKee Run - Unit 3 Flux Probe	60,000					60,000
McKee Run - Unit 3 Cooling Tower Fill	450,000					450,000
McKee Run - Unit 3 Cooling Water Line Replacement	40,000					40,000
Subtotal	***4,117,500***	***1,325,000***	***185,000***	***762,500***	***162,500***	***1,682,500***
TOTAL	**19,979,498**	**4,255,885**	**3,922,625**	**3,792,207**	**3,057,436**	**4,951,345**

REVENUE

REVENUE SOURCE	TOTAL 5 YEAR COST	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Electric I and E Fund	16,145,498	2,596,885	3,322,625	3,292,207	2,482,436	4,451,345
Electric Depreciation Reserve Fund	2,783,000	683,000	600,000	500,000	500,000	500,000
Electric Bond	976,000	976,000				
State Grant	75,000				75,000	
TOTAL	**19,979,498**	**4,255,885**	**3,922,625**	**3,792,207**	**3,057,436**	**4,951,345**

Distribution Feeder Replacement Program

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: EE0000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 6

NEW PROJECT: No

PROJECT DESCRIPTION: Substation feeders are defined as the 3-phase lines that carry the load from the substations to the customers' neighborhood. Additionally they interconnect to other substations to provide load redundancy should there be a failure of an adjacent substation. Many of the older substation feeders have smaller conductors that cannot carry the load that is required during system peaks and emergency situations. This project would systematically upgrade these conductors to increase the capacity of the feeders as well as ultimately reducing system losses. Lastly, many of the feeder components have reached the end of their useful life and require substantial maintenance.

NEED, JUSTIFICATION, BENEFIT: These lines are typically older, smaller, and reaching the end of their useful life. This program will provide the needed systematic maintenance to the conductors, cross arms, switches, and insulators as well as increasing system capacity, ultimately resulting in more efficient operations by reducing line losses.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Due to the age and condition of the current feeders delaying this systematic maintenance/upgrade program will result in reduced system utilization as well as detrimentally impacting future reliability.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: This will be a multi-year project until all circuits have been upgraded as required.

COMMENTS: The cost for to run one (1) mile of underground equates to $135,400 per mile; the cost to run one (1) mile of overhead equates to $21,342. It is our goal to run two (2) miles of underground and five (5) miles of overhead per year. The project will begin by increasing the capacity from Dover Downs Substation to the St. Jones Substation. Areas will be along Dover Downs, Home Depot, Jefferson Boulevard and Kmart. Additional areas to be improved is South State Street and Old Mill Road. The project will include replacing switches giving them increased capacity to 600 amp throughout the system.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction		377,510	377,510	377,510	377,510	377,510	377,510	**2,265,060**
Miscellaneous								
Other								
TOTAL		**377,510**	**377,510**	**377,510**	**377,510**	**377,510**	**377,510**	**2,265,060**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		377,510	377,510	377,510	377,510	377,510	377,510	**2,265,060**
TOTAL		**377,510**	**377,510**	**377,510**	**377,510**	**377,510**	**377,510**	**2,265,060**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Distribution Upgrades

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: EE0000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 2

NEW PROJECT: No

PROJECT DESCRIPTION: This project involves the systemic replacement of overhead lines with underground lines whenever services are being moved, wire is damaged, trees cause a high number of outages, or development is in progress and it is befificial to the Utility to convert to underground. This can involve a single line section or an entire residential neighborhood. Annual outage records are reviewed and selected areas are scheduled for upgrade to underground service. Additionally, this program funds the replacement of existing underground conductors and equipment that have reached their useful life and have started failing and require replacement.

NEED, JUSTIFICATION, BENEFIT: The number of storm and tree-related outages has been greatly reduced under this program and further improvements can be made to insure the most reliable electric service possible. Reliability has become one of most important factors to electric customers, second only to safety. The utility has responded by attempting to provide the most reliable system possible. Underground cable replacement is necessary as the useful, reliable, life of the original underground cable was 20 – 30 years. By proactively replacing this cable we will minimize outages and improve our reliability. In addition to cable replacement, overhead lines are replaced with underground to minimize outages caused by tree growth or animal contact. Lastly overhead lines that have reached the end of their usefull life are replaced with underground instead of rebuilding the overhead.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Continued outages lead to increased complaints from our customers and will lead to customer dissatisfaction. There will be increased costs for repairs made under outage conditions as well as loss of electric revenue.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: This project will be ongoing over the 12 months of the budget year.

COMMENTS: This account is used to upgrade any trouble areas during the year. The following developments are to be upgraded: Schoolview, Crossgates, and Buchanan Acres.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	1,300,000	500,000	500,000	500,000	500,000	500,000	500,000	**4,300,000**
Miscellaneous								
Other								
TOTAL	**1,300,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**4,300,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric Depreciation Reserve Fund	1,300,000	500,000	500,000	500,000	500,000	500,000	500,000	**4,300,000**
TOTAL	**1,300,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**500,000**	**4,300,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Relay Test Equipment

FISCAL YEAR : 2010

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 1

NEW PROJECT: Yes

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: Purchase of relay test equipment and required training.

NEED, JUSTIFICATION, BENEFIT: The Public Utilities currently hires a contractor for the purpose of testing all relaying (protection) equipment in the city's electric substations. The testing of the relays and maintaining their proper operation is necessary to protect all of the substation equipment and the customers connected to the electrical system. Additionally, the North American Electric Reliability Corporation (NERC) mandates reliability standards that requires the Utility to document testing on a routine basis. This test equipment will provide the necessary testing and documentation to ensure the City of Dover maintains compliance with these requirements.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Staff is proposing to make this an internal function of the Electric Division to reduce contractor expenses. The City of Dover will be fined if NERC standards are not met and maintained. The price of the relay testing equipment and required training is a onetime cost and has a quick payback time, saving the City money for years to come.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: The on-going cost of hiring a contractor will be eliminated.

TIME-LINE/CURRENT STATUS: Purchase equipment and supply training as soon as possible.

COMMENTS: By moving this function into and "in-house" project we project a $18,292 annual savings. The payback will be approximately 2.5 years.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous		48,795						**48,795**
Other								
TOTAL		**48,795**						**48,795**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		48,795						**48,795**
TOTAL		**48,795**						**48,795**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
		-18,292	-18,292	-18,292	-18,292	-18,292		**-91,460**

Hot Spot Identification

FISCAL YEAR S : 2010 - 2010

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 8

NEW PROJECT: Yes

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: Purchase of Infrared Camera.

NEED, JUSTIFICATION, BENEFIT: The Public Utilities currently hires a contractor for the purpose of locating failing connections which show up as “hot spots” in an infrared camera. The facilities inspected include the electric divisions substations, distribution system, and transmission system. Additionally the water and wastewater divisions inspect the motor control centers at the water treatment plant, wells and pump stations. The locating and corrective maintenance of these failing connections or “hot spots” is a critical procedure to increase the reliability of the utilities electrical system. Staff is proposing to make this an internal function of the utility.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The price of the infrared camera and software is a one time cost and has a relatively quick payback time, saving the city money for years to come. Training for level 1 certifications is included with the purchase of the IR camera.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: The cost of hiring a contractor will be eliminated which will reduce the operation budgets of four of the divisions. In FY08 the four divisions spent over $10,700 for this function. The payback is less than three years.

TIME-LINE/CURRENT STATUS: FY 2010

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous		26,400						**26,400**
Other								
TOTAL		**26,400**						**26,400**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		26,400						**26,400**
TOTAL		**26,400**						**26,400**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
		-10,700	-10,700	-10,700	-10,700	-10,700		**-53,500**

Mid City Substation

FISCAL YEAR S : 2010 - 2011

PROJECT NO: 0

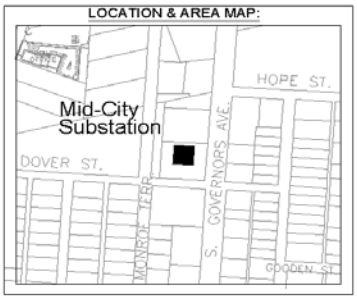
CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 3

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project will allow the Utility to provide an oil containment area for the transformer, upgrade the 69 Kv line/transformer protection to a three-breaker scheme, update the distribution breakers as they have reached the end of their useful life, and rehabilitate the switchgear to extend its life.

NEED, JUSTIFICATION, BENEFIT: The transformer does not have a containment pit to protect the environment in case of a catastrophic failure as required by standard operating procedures and mandated by the EPA. Additionally, the transmission line serving this substation is protected at Dover Air Force Base and North Street switching yards, which means that five substations (Lebanon, Danner Farm, Mid City, Mayfair, and VanSant) will lose power when a line fault occurs. The placement of the 3-breaker scheme at this location will help minimize substation outages during line faults and will ensure that Mid City Substation does not lose service under normal line fault situations. It accomplishes this by determining which line section is faulted and opens only the line that is affected; whereby, the station will receive power from the other side of the loop. Lastly, the switchgear will be repaired/repainted and major moveable components will be replaced as they have reached the end of their useful life.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The failure to place the transformer in a containment pit prior to a catastrophic failure would mean oil would be spilled into the area and could contaminate the surrounding vicinity, which also includes a water well. Additionally, we could be cited by the EPA for failure to enclose the oil vessel. Not upgrading the transmission line protection will result in large, unnecessary, outages for transmission line faults, ultimately affecting a large number of customers, including the hospital as this is the normal source. Distribution breakers may not operate properly resulting in larger outages than necessary or catastrophic failure.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Engineering and long lead time material will be ordered in Fiscal Year 2010 with construction completed in Fiscal Year 2011.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		75,000	25,000					**100,000**
Land								
Construction		408,000	980,461					**1,388,461**
Miscellaneous								
Other								
TOTAL		**483,000**	**1,005,461**					**1,488,461**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		483,000	1,005,461					**1,488,461**
TOTAL		**483,000**	**1,005,461**					**1,488,461**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Replacement of 69 KV Breakers

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2011

PROJECT NO: EE0901

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 5

NEW PROJECT: No

PROJECT DESCRIPTION: This is an ongoing project that involves the replacement of 69 KV breakers.

NEED, JUSTIFICATION, BENEFIT: The 69 KV breakers in the transmission system vary in age and reliability. Currently there are 39 of these breakers in the transmission system. Installation of the 230 KV substation did place the breakers in a higher fault current environment than they are rated to safely operate in. This project will replace the most vulnerable breakers first and will eventually replace all of the oil-filled breakers with SF6 gas-filled breakers designed to handle the higher fault current. Additionally, at the time the breakers are replaced the control wiring and relays will also be replaced to bring the installation into current standards.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Since these breakers have reached the end of their expected life, failure to replace them will result in miss-operation and either cause larger outages than necessary or cause greater damage to protected equipment. If the breaker failed on an interconnected customer, this failure could result in greater liability exposure.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: locations for the breakers to be installed, include the following substations: McKee Run, Frazier, Danner Farm and Mid City.

COMMENTS: Implementation of this project will allow for the replacement of several old and unreliable breakers allowing full utilization of the new 230 KV substation. The expected total project cost of $908,443 was spread out over a six-year timetable with completion in FY 2011.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		3,000						**3,000**
Land								
Construction	625,443	180,000	100,000					**905,443**
Miscellaneous								
Other								
TOTAL	**625,443**	**183,000**	**100,000**					**908,443**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric Depreciation Reserve Fund	625,443	183,000	100,000					**908,443**
TOTAL	**625,443**	**183,000**	**100,000**					**908,443**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Substation PT & CT Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2012

PROJECT NO: 22

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 4

NEW PROJECT: No

PROJECT DESCRIPTION: This project will be replacing aging metering/system protection equipment in the older substations. The equipment to be replaced measures the line voltage and current which is then interpreted by the relays for system protection. Additionally, the lightning arrestors will be replaced which protects the equipment during lightning strikes.

NEED, JUSTIFICATION, BENEFIT: This equipment has a normal 30 year life and has exceed that in all of our substations except the newest substations. By replacing the equipment during normal scheduled maintenance shut downs it will prevent larger outages due to equipment failure.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Such equipment has caused large outages by faulting due to its age. Additionally, many of the current components have not been tested for PCB's which could result in expensive cleanup charges should they fail.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Materials to be ordered in October 2009. Equipment will start arriving in the Spring 2010 and be installed during the regular scheduled substation maintenance schedules until the project is completed in FY 12.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		10,000						**10,000**
Land								
Construction		250,880	256,218	267,715				**774,813**
Miscellaneous								
Other								
TOTAL		**260,880**	**256,218**	**267,715**				**784,813**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		260,880	256,218	267,715				**784,813**
TOTAL		**260,880**	**256,218**	**267,715**				**784,813**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Distribution Capacitors and Controls

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 7

NEW PROJECT: No

PROJECT DESCRIPTION: Install distribution capacitors throughout the system to correct poor power factor on distribution circuits. Install capacitor controllers capable of 2-way communication to provide real-time monitoring and remote control operation. These controllers will be capable of switching the capacitors on and off to comply with system requirements. This project will also replace out dated substation meters with units capable of advanced metering such as power factor and harmonics to further analyze system performance. Lastly, distribution line recorders will be purchased and installed to provide power factor recordings to fine tune this operation.

NEED, JUSTIFICATION, BENEFIT: Additional capacitance is required in order to meet system power factor requirements at the Delmarva Power and Light interchange point. This was substantiated through a load-flow study conducted by Shaw in early 2004 and distribution study by Wilson & Wilson in 2006. The current capacitor controls are not providing the granularity required to turn them off and on as required to meet both the power quality requirments of our customers and DP&L requirements. Additonal controls are required to fine tune the systems operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Without the additional capacitor banks and more importantly controls, the City may experience a low/high voltage problem at the customer level and/or the possibility of having to pay power factor penalties to Delmarva Power and Light.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: N/A

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	344,995	120,000	200,000	100,000	100,000	100,000	100,000	**1,064,995**
Miscellaneous								
Other								
TOTAL	**344,995**	**120,000**	**200,000**	**100,000**	**100,000**	**100,000**	**100,000**	**1,064,995**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund	344,995	120,000	200,000	100,000	100,000	100,000	100,000	**1,064,995**
TOTAL	**344,995**	**120,000**	**200,000**	**100,000**	**100,000**	**100,000**	**100,000**	**1,064,995**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Lighting Project and Rehabilitation

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: EE0000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 9

NEW PROJECT: No

PROJECT DESCRIPTION: This fund was developed to replace and repair existing street lights or install new lights upon customer request.

NEED, JUSTIFICATION, BENEFIT: The Electric Division receives numerous requests for lighting improvements. These requests are due to the lights aging and as they age they put out less light and become unreliable. There are many developments that are in need of street light improvements. This fund would also provide funding for new large security light requests.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Constant complaints of poor street lighting and multiple failures due to antiquated lights.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: This project is ongoing.

COMMENTS: This fund will remain active as long as there are improvements to be made. Private area lighting requests are a source of revenue for the City. Areas completed are Greens of Dover, Farmview, Twelve oaks, Oldmill Acres 1, White Oak Apartments and Governors Avenue (South 100 Block). Areas to be completed this year are: Westfield, Fairview, Cranberry Run, Mill Creek, Independence Village and Sherwood if funds remain avaliable.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	250,000	50,000	50,000	50,000	50,000	50,000	50,000	**550,000**
Miscellaneous								
Other								
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**550,000**

FINANCING:

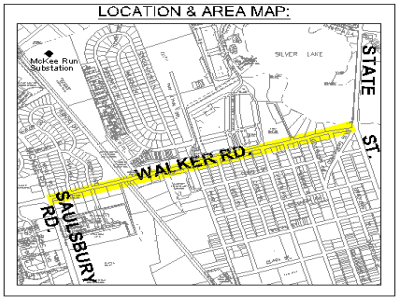
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund	250,000	50,000	50,000	50,000	50,000	50,000	50,000	**550,000**
TOTAL	**250,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**550,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Walker Road Overhead Conversion

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2011 - 2012

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 10

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will be constructed in conjunction with the water main upgrade planned for this section of Walker Road. The Electric Division will install conduit, cable and equipment, and remove the overhead power lines as the Water Division installs the new water main.

NEED, JUSTIFICATION, BENEFIT: The installation of the new power lines will increase the power capacity and improve the reliability to the customers by decreasing the exposure of the system to weather events. Additionally, the existing overhead requires upgrading to increase the capacity of the electric system.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The aging pole line will require the replacement of new poles and overhead wire. Leaving the overhead line in service increases the chances of weather related damages.

THIS PROJECT IS RELATED TO THE FOLLOWING: Water Division Walker Road Water Main Upgrade

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and material procurement in Fiscal Year 2010. Construction is scheduled to begin in the fall of 2010 and completion is scheduled for June of 2011.

COMMENTS: This project will be in conjunction with the water main project; therefore, if the water main is delayed this project will also be delayed.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction				117,901				**117,901**
Miscellaneous			350,511					**350,511**
Other				164,700				**164,700**
TOTAL			**350,511**	**282,601**				**633,112**

FINANCING:

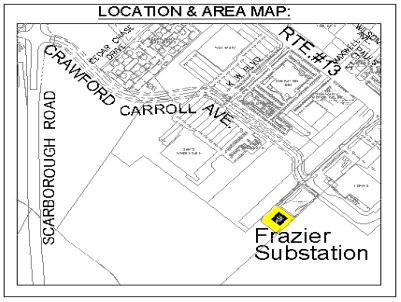
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund			350,511	282,601				**633,112**
TOTAL			**350,511**	**282,601**				**633,112**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Frazier Substation Reliability Upgrade

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2012 - 2013

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 3

NEW PROJECT: No

PROJECT DESCRIPTION: The high-side of the substation will be upgraded to include transmission line protection breakers as well as the transformer breaker.

NEED, JUSTIFICATION, BENEFIT: When the transmission line experiences a fault this substation loses power until the short circuit is found and the appropriate switching is accomplished. With the installation of the 2 new line breakers the faulted transmission line will be isolate from the substation and the customers will not experience an interruption of service.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Accepting the outages in the north-west section of the system during transmission line faults.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: The design will begin in July 2011; materials ordered in July 2012 and construction to be completed by June 2013.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design				155,000				**155,000**
Land								
Construction					610,247			**610,247**
Miscellaneous								
Other								
TOTAL				**155,000**	**610,247**			**765,247**

FINANCING:

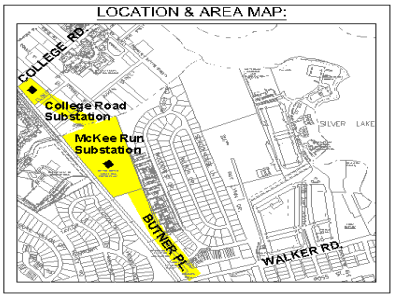
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				155,000	610,247			**765,247**
TOTAL				**155,000**	**610,247**			**765,247**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

College Road to McKee Substation Feeders

LOCATION/AREA MAP PHOTO:



FISCAL YEAR : 2012

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 7

NEW PROJECT: No

PROJECT DESCRIPTION: This project will be performed in conjunction with the water main upgrade. The Electric Division will bury the overhead power lines as the Water Department installs the new water main.

NEED, JUSTIFICATION, BENEFIT: The installation of the new power lines will increase the capacity and improve the reliability to the customers by decreasing the chances of wind, rain, and lightening damage. Additionally, this will replace the overhead power lines through the trees between McKee Road and College Road, thus reducing the maintenance of the right-of-way.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The aging pole line will require the installation of new poles and overhead wire due to their age. Leaving the overhead line up increases the chances of weather related damages.

THIS PROJECT IS RELATED TO THE FOLLOWING: McKee Run Tank Water Main Upgrade

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and material procurement in FY 11, construction to begin in the fall of 2011 with along with the water line installation. Completion is scheduled for June of 2012.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design				10,000				**10,000**
Land								
Construction								
Miscellaneous				297,000				**297,000**
Other								
TOTAL				**307,000**				**307,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				307,000				**307,000**
TOTAL				**307,000**				**307,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Transmission Line Maintenance Program

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2012 - 2014

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 8

NEW PROJECT: Yes

PROJECT DESCRIPTION: Replace aging porcelain insulators, bolts, armor rod, ground wires, clamps and related equipment on the transmission pole lines. The major improvement will be the replacement of the old insulators with new polymer insulators and other equipment that is showing deterioration.

NEED, JUSTIFICATION, BENEFIT: Insulators have a defined equipment life due to sun and weather conditions breaking down the porcelain and base bonding cement. Insulators installed in 1960's and 1970's are due for replacement due to this deterioration. We have experienced several transmission outages due to insulator failure. Replacing the insulators should extend the life an additional 30 years.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Outages may occur if insulators are not replaced and fail due to deterioration.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Beginning in FY2012 through FY2016, we will replace the insulators on the older transmission lines.

COMMENTS: N/A

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous				75,000	75,000	75,000	75,000	**300,000**
Other								
TOTAL				**75,000**	**75,000**	**75,000**	**75,000**	**300,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				75,000	75,000	75,000	75,000	**300,000**
TOTAL				**75,000**	**75,000**	**75,000**	**75,000**	**300,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

69kV Substation Switch Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2013 - 2014

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 4

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will be replacing obsolete 69kV switches in the substation/transmission system.

NEED, JUSTIFICATION, BENEFIT: The new switches will be gang operated switches which are electrically better to operate and most importantly increase safety to the operator. The switches that are to be replaced have reached the life expectancy and have a potential of failure if not replaced.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The majority of the switches are very old, making for difficult operation and frequent maintenance to ensure operation as needed. Delaying this program will result in switch failure possibly resulting in wide spread power outages. The system has experianced more frequent switch failures in recent years.

THIS PROJECT IS RELATED TO THE FOLLOWING:

EXPLANATION OF IMPACT ON OPERATING BUDGET:

TIME-LINE/CURRENT STATUS: Switch replacement will begin in FY 2013 and will be complete in FY 2018.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous					80,000	80,000	240,000	**400,000**
Other								
TOTAL					**80,000**	**80,000**	**240,000**	**400,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund					80,000	80,000	240,000	**400,000**
TOTAL					**80,000**	**80,000**	**240,000**	**400,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Horsepond Substation Reliability Upgrade

FISCAL YEAR S : 2013 - 2014

PROJECT NO: 1

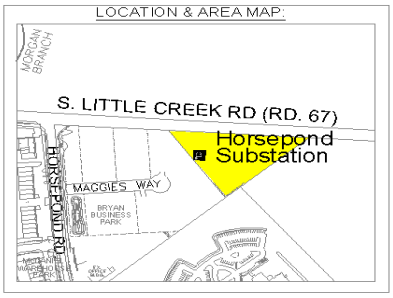
CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 6

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: The high-side of the substation will be upgraded to include two transmission line protection breakers.

NEED, JUSTIFICATION, BENEFIT: When the transmission line experiences a fault this substation loses power until the short circuit is found and the appropriate switching is accomplished. With the installation of the line breakers the faulted transmission line will be isolated from the substation and the customers will not experience an interruption of service.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Accepting the outages in the south-east section of the system during transmission line faults.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: The design and long lead time materials will be completed in FY 13 and the majority of the materials purchased and construction completed in FY 14.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design					70,000	60,000		**130,000**
Land								
Construction					100,000	531,812		**631,812**
Miscellaneous								
Other								
TOTAL					**170,000**	**591,812**		**761,812**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund					170,000	591,812		**761,812**
TOTAL					**170,000**	**591,812**		**761,812**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

General Scott Switchgear

LOCATION/AREA MAP PHOTO:



FISCAL YEAR : 2014

PROJECT NO: 1

CATEGORY: Electric

DEPARTMENT: Public Utilities - Electric Eng

DEPT. RANKING: 5

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will recondition the metal clad switchgear and replace the distribution breakers as they have reached the end of their useful life.

NEED, JUSTIFICATION, BENEFIT: This station carries the industrial and residential load on the west side of Dover. The station distribution switch gear was installed in 1985 and the reconditioning of the switch gear should extend the life of the equipment to year 2033. Additionally, the breakers have numerous moving parts, including plastic components, that tend to fail with age resulting in mis-operation of the breaker.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: General Scott's switchgear is aging and reconditioning will extend the life of the switchgear and replacing the breakers will facilitate correct fault operation.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Equipment order and work will be completed in FY 14

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction						544,700		**544,700**
Miscellaneous								
Other								
TOTAL						**544,700**		**544,700**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund						544,700		**544,700**
TOTAL						**544,700**		**544,700**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

New Developments

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: EE0808

CATEGORY: Electric

DEPARTMENT: Public Utilities - Trans and Dist

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: This project purchases materials and equipment that are used to provide electric service to new housing developments, businesses, and industrial developments. Additionally, a portion of this expense is offset by the extension payments whereby new developers pay a $1,200.00 per residential lot connection fee or business and industrial developers pay the total material expense for line extensions.

NEED, JUSTIFICATION, BENEFIT: During the course of each budget year, new developers request line extensions for new electric projects. Some are new projects while other projects may have received plan approval previously but were not completed for any number of reasons.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Developers would not be able to receive electric service to new facilities.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: This project is on-going.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	3,363,500	881,300	897,925	914,881	932,179	949,823	978,318	**8,917,926**
Miscellaneous								
Other								
TOTAL	**3,363,500**	**881,300**	**897,925**	**914,881**	**932,179**	**949,823**	**978,318**	**8,917,926**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund	3,363,500	881,300	897,925	914,881	932,179	949,823	978,318	**8,917,926**
TOTAL	**3,363,500**	**881,300**	**897,925**	**914,881**	**932,179**	**949,823**	**978,318**	**8,917,926**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Miscellaneous Capital Equipment Replacement

LOCATION/AREA MAP PHOTO:

FISCAL YEAR : 2010

PROJECT NO: 00000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: Yes

PROJECT DESCRIPTION: Replace or procure capital equipment valued between $5,000 and $25,000.
Equipment includes the following:
Oil conditioning system
Station compressed air system components
HVAC and process equipment motors
Condensate and feedwater system pump
Cooling tower fan drive
Boiler system safety and control valves

NEED, JUSTIFICATION, BENEFIT: This project is required to fund the replace of capital items that are expected to reach their useful life in 2010 and will need to be replaced to maintain plant system and unit reliability.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Extended equipment and /or unit outage time will result from lack of funding this project. This will have a direct effect on the cost of energy during the extended outage time as well as increase future energy capacity charges.

THIS PROJECT IS RELATED TO THE FOLLOWING: Safe and reliable operation of plant equipment

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal O&M budget. Should result in reduced risk of increasing maintenance budget in the future.

TIME-LINE/CURRENT STATUS: This project will be implemented in 2010.

COMMENTS: n/a

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		3,000	2,000	2,500	2,500	3,500		**13,500**
Land								
Construction		6,000	5,000	5,000	6,000	12,000		**34,000**
Miscellaneous		80,000	75,000	77,000	79,000	75,000		**386,000**
Other								
TOTAL		**89,000**	**82,000**	**84,500**	**87,500**	**90,500**		**433,500**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		89,000	82,000	84,500	87,500	90,500		**433,500**
TOTAL		**89,000**	**82,000**	**84,500**	**87,500**	**90,500**		**433,500**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run Unit 1 COMS Replacement

LOCATION/AREA MAP PHOTO:

FISCAL YEAR : 2010

PROJECT NO: PP2009

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: It is becoming more and more difficult to locate spare parts to repair the existing opacity analyzers on all three McKee Run units. The recommendation is to replace the existing monitors beginning with Unit 3 in fiscal year 2009. This replacement is necessary to keep Unit 1 operational.

NEED, JUSTIFICATION, BENEFIT: In accordance with the existing Title V permit, continuous opacity monitors are necessary during all periods of boiler operation. The purchase and installation of a new opacity monitor will ensure compliance with this section of the regulation, reliability of the unit and maximization of capacity payments.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Potential for unit to be unavailable for operation resulting in forced outages and loss of capacity payments.

THIS PROJECT IS RELATED TO THE FOLLOWING: All three McKee Run units are currently operating with the same vintage opacity monitoring equipment. The expectation is that all three systems will need to be replaced in the years ahead. The total cost of replacement can be spread over a three year period by using the replaced units as an additional source of spare parts for the existing units still in service. All three units are expected to be replaced by Fiscal 2010-2011.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget. This would be considered a direct replacement for aging equipment.

TIME-LINE/CURRENT STATUS: Unit 1 replacement to be completed in fiscal year 2010.

COMMENTS: Delaying the completion of this project could result in the inability to comply with the Title V operating permit, resulting in increased forced outages and loss of income from capacity sales.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous		33,000						**33,000**
Other								
TOTAL		**33,000**						**33,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		33,000						**33,000**
TOTAL		**33,000**						**33,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

McKee Run Warehouse/Admin Smoke & Heat Detection System

FISCAL YEAR : 2010

PROJECT NO: PP2010

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 2

NEW PROJECT: No

PROJECT DESCRIPTION: The project will install a fire and heat alarm system in the warehouse and administration buildings.

NEED, JUSTIFICATION, BENEFIT: Insurance company recommendation is to provide for smoke and heat detection in the plants un-manned areas that contain combustible materials to provide early warning of the onset of any fire. Two areas to be addressed in the project include the administrative building and the warehouse.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Potential for fire detection and location to be delayed thereby causing extensive fire damage to vital areas of the power plant.

THIS PROJECT IS RELATED TO THE FOLLOWING: All three McKee Run units are currently operating with the same vintage opacity monitoring equipment. The expectation is that all three systems will need to be replaced in the year's ahead. Our hopes are to spread the costs for total replacement over a three year period by using the replaced units as an additional source of spare parts for the existing units still in service. All three units are expected to be replaced by fiscal year 2010/11. This is the second unit to be replaced.

EXPLANATION OF IMPACT ON OPERATING BUDGET: This project would be considered a capital equipment addition and therefore is expected to be funded outside the normal operating budget.

TIME-LINE/CURRENT STATUS: Project to be completed in fiscal year 2009-2010.

COMMENTS: Delaying the completion of this project could result in an increase in the damage to warehouses or to the Plant administrative building due to delayed emergency response in the event of a fire.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous		55,000						**55,000**
Other								
TOTAL		**55,000**						**55,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		55,000						**55,000**
TOTAL		**55,000**						**55,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

VanSant CT Mark IV Upgrades

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2010 - 2011

PROJECT NO: 000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 4

NEW PROJECT: No

PROJECT DESCRIPTION: It is becoming more and more difficult to locate spare parts to repair the existing Mark IV control system at VanSant Station. The recommendation is to replace the existing Mark IV control system in fiscal year 2010/2011. This replacement is necessary to ensure the reliability of the combustion turbine operation for years to come.

NEED, JUSTIFICATION, BENEFIT: The existing Mark IV control system is a 1990 vintage. Replacement of the existing controls will ensure the reliability of the unit and maximization of capacity payments in the future.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Potential for unit to be unavailable for operation resulting in forced outages and loss of capacity payments.

THIS PROJECT IS RELATED TO THE FOLLOWING: Safe and reliable operation of the VanSant combustion turbine and and preparation of future upgrades to the unit that will increase capacity sales.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget. This would be considered a direct replacement for aging equipment.

TIME-LINE/CURRENT STATUS: Would expect the project to be completed no later than June of 2009 to meet the National Electric Code's requirement to complete an Arc Flash Analysis.

COMMENTS: Delaying the completion of this project could result in increased forced outages and loss of income from capacity sales. I believe the budgetary estimate that was provided by GE indicates an estimated minimum cost for the upgrades to the existing Mark IV system. One of our supervisors recently attended a conference of frame 6 combustion turbine users who indicated that costs associated with this type of a project may increase to as high as $2,000,000 if we elect to install all of the upgrades that GE may recommend once the project is initiated.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		100,000						**100,000**
Land								
Construction		600,000						**600,000**
Miscellaneous								
Other								
TOTAL		**700,000**						**700,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric Bond		700,000						**700,000**
TOTAL		**700,000**						**700,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Plant Driveway Repaving

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2010 - 2010

PROJECT NO: 00000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 5

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will repave the plant driveway from the entrance gate to the main plant building as well as the emergency drive around the back side of the plant and the parking areas. This project will be done in 3 phases starting in 2010 and completing in 2014.

NEED, JUSTIFICATION, BENEFIT: The current main driveway to the plant proper is in very poor condition making it a hazard to travel , especially in inclement weather. Additionally, there are currently numerous areas of potholes and extensive cracks which if left unrepaired will lead to a general failure . Should this occur, the replacement of the entire plant paving will be required on an accelerated schedule.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The consequences of delaying this project will be to increase the cost of repair/replacement and will advance the timeframe for that replacement.

THIS PROJECT IS RELATED TO THE FOLLOWING: Material condition of plant structures and personnel safety.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget .This project should reduce future year O&M budget requirements for more extensive and costly repairs if not done as proposed.

TIME-LINE/CURRENT STATUS: This project will be done in three phases with the first phase to be completed in 2010 and the remaining phases to be executed in every other year, 2012 and 2014.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction		240,000						**240,000**
Miscellaneous								
Other								
TOTAL		**240,000**						**240,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric Bond		240,000						**240,000**
TOTAL		**240,000**						**240,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Work Management System Replacement

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2010 - 2010

PROJECT NO: 000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 6

NEW PROJECT: Yes

PROJECT DESCRIPTION: The project will replace the current work management system (Maximo) with a new system having additional functionality.

NEED, JUSTIFICATION, BENEFIT: The current work management system is no longer supported by the vendor and has limited functionality. The new system will provide capability to perform weekly manpower scheduling, automatic parts assignment and inventory, and Project Management interface. This system will improve the efficiency of our work management processes resulting in improved productivity.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Without this system, we will be required to do many work management processes manually which requires more manpower to track and manage resources and results in under-utilization of resources.

THIS PROJECT IS RELATED TO THE FOLLOWING: Plant resource utilization.

EXPLANATION OF IMPACT ON OPERATING BUDGET: The annual renewal of the technical support for this system is estimated to be $13,500. This cost is expected to be offset by improved productivity.

TIME-LINE/CURRENT STATUS: This project will be completed in 2010.

COMMENTS: n/a

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous		85,000						**85,000**
Other								
TOTAL		**85,000**						**85,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		85,000						**85,000**
TOTAL		**85,000**						**85,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

Unit 3 - Remove Cyclone Separators

FISCAL YEAR S : 2010 - 2010

PROJECT NO: N/A

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 7

NEW PROJECT: Yes

PROJECT DESCRIPTION: Remove the unite 3 boiler cyclone separators.

NEED, JUSTIFICATION, BENEFIT: As a part of the pollution remediation project, the change from residual to distillate oil will reduce the particulate loading in the flue gas and will make the boiler cyclone separators very inefficient. This project includes the removal of boiler particulate cyclone separators in the boiler along with the removal of flue gas recirculation system equipment. Major benefits from the project are two fold including the reduction of pressure drop through the boiler thereby requiring less fan power for combustion and the elminiation of parasitic load required to operate the flue gas recirculation system.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Eliminating this project will result in a lost opportunity to reduce unit operating costs.

THIS PROJECT IS RELATED TO THE FOLLOWING: Identical project proposed for unit 1 and unit 2. Cost basis assumes that all three projects will be bid at the same time.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget. The impact on the operating budget will be reduced station service during the operating period and reduced regulatory reporting requirements.

TIME-LINE/CURRENT STATUS: This project will be completed during the 2010 budget year and will require a unit maintenance outage to be performed. In addition, testing will be conducted in 2009 to determine the effectiveness of the cyclones. Assuming the efficiency is very low, we will submit these results to the regulatory agency to get approval for their removal.

COMMENTS: This project will require regulatory approval. Cost for permitting is included in the unit 3 project.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		6,000						**6,000**
Land								
Construction		30,000						**30,000**
Miscellaneous								
Other		15,000						**15,000**
TOTAL		**51,000**						**51,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		51,000						**51,000**
TOTAL		**51,000**						**51,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

Unit 1 Remove Cyclone Separataors

FISCAL YEAR : 2010

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 8

NEW PROJECT: Yes

PROJECT DESCRIPTION: Remove Unit 1 boiler cyclone separators.

NEED, JUSTIFICATION, BENEFIT: As part of the pollution remediation project, the change from residual to distillate oil will reduce the particulate loading in the flue gas and will make the boiler cyclone separators very inefficient. This project includes the removal of boiler particulate cyclone separators in the boiler alone with the removal of flue gas recirculation system equipment. Major benefits from the project are two fold including the reduction of pressure drop through the boiler thereby requiring less fan power for combustion and the elimination of parasitic load required to operate the flue gas recirculation system.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Eliminating this project will result in a lost opportunity to reduce operating costs.

THIS PROJECT IS RELATED TO THE FOLLOWING: Identical project proposed for unit 2 and unit 3. Cost basis assumes that all three projects will be bid at the same time.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget. The impact on the operating budget will be reduced station service during the operating period and reduced regulatory reporting requirements

TIME-LINE/CURRENT STATUS: This Project will be completed during the 2010 budget year and will require a unit maintenance outage to perform. In addition, testing will be conducted in 2009 to determine the effectiveness of the cyclones. Assuming the efficiency is very low, we will submit these results to the regulatory agency to get approval for their removal.

COMMENTS: This project will require regulatory approval. Cost for permitting is included in the unit 3 project.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		6,000						**6,000**
Land								
Construction		30,000						**30,000**
Miscellaneous								
Other								
TOTAL		**36,000**						**36,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric Bond		36,000						**36,000**
TOTAL		**36,000**						**36,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

Unit 2 - Remove Cyclone Separators

FISCAL YEAR S : 2010 - 2010

PROJECT NO: PP2010

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 9

NEW PROJECT: Yes

PROJECT DESCRIPTION: Remove the unit 2 boiler cyclone separators

NEED, JUSTIFICATION, BENEFIT: As part of the pollution remediation project, the change from residual to distillate oil will reduce the particulate loading in the flue gas and will make the boiler cyclone separators very inefficient. This project includes the removal of boiler particulate cyclone separators in the boiler alone with the removal of flue gas recirculation system equipment. Major benefits from the project are two fold including the reduction of pressure drop through the boiler thereby requiring less fan power for combustion and the elimination of parasitic load required to operate the flue gas recirculation system.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Eliminating this project will result in a lost opportunity to reduce operating costs.

THIS PROJECT IS RELATED TO THE FOLLOWING: Identical project proposed for unit 1 and unit 3. Cost basis assumes that all three projects will be bid at the same time.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget. The impact on the operating budget will be reduced station service during the operating period and reduced regulatory reporting requirements.

TIME-LINE/CURRENT STATUS: This Project will be completed during the 2010 budget year and will require a unit maintenance outage to perform. In addition, testing will be conducted in 2009 to determine the effectiveness of the cyclones. Assuming the efficiency is very low, we will submit these results to the regulatory agency to get approval for their removal.

COMMENTS: This project will require regulatory approval. Cost for permitting is included in the unit 3 project.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		6,000						**6,000**
Land								
Construction		30,000						**30,000**
Miscellaneous								
Other								
TOTAL		**36,000**						**36,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund		36,000						**36,000**
TOTAL		**36,000**						**36,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

McKee Run - Hot Water Boilers

FISCAL YEAR : 2011

PROJECT NO: 0000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 5

NEW PROJECT: Yes

PROJECT DESCRIPTION: Replace the 2 existing hot water boilers with smaller more efficient (90 percent or better) boilers. This project will tie in the Units 1 and 2 plant heating system to the hot water system.

NEED, JUSTIFICATION, BENEFIT: : A result of the conversion from residual to distillate oil as part of the pollution remediation project, the existing hot water boilers will no longer be needed to heat oil. Therefore the only load on the hot water system will be for plant heating. The existing hot water boilers are grossly oversized for this application and not suited for this seasonal operating mode. Replacing the existing boilers with properly sized boilers will reduce costs on monthly gas usage and reduced maintenance on existing boilers. Installing more efficient boilers will also result in reducing the carbon footprint of the plant.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The quicker we replace the current boilers with the more efficient units the quicker payback on investment.

THIS PROJECT IS RELATED TO THE FOLLOWING: Efficiency and reliability and cost savings for the plant.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Reduced cost of gas should be realized in future budgets with the more efficient boilers.

TIME-LINE/CURRENT STATUS: The project is estimated to be completed in 2010.

COMMENTS: The plant Hot water boilers would only be supplying heat to the plant. There would not be a need to supply hot water and heat tracing for the #6 oil that we are replacing with #2 oil. The existing hot water boilers are 36 yrs old and have an efficiency of less than 85%.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction			70,000					**70,000**
Miscellaneous								
Other								
TOTAL			**70,000**					**70,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund			70,000					**70,000**
TOTAL			**70,000**					**70,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run Unit 2 COMS Replacement

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2011 - 2011

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: It is becoming more and more difficult to locate spare parts to repair the existing opacity analyzers on all three McKee Run units. The recommendation is to replace the existing monitors beginning with Unit 3 in fiscal year 2008/09. This replacement is necessary to keep Unit 2 operational.

NEED, JUSTIFICATION, BENEFIT: In accordance with the existing Title V permit continuous opacity monitors are necessary during all periods of boiler operation. The purchase and installation of a new opacity monitor will ensure compliance with this section of the regulation, reliability of the unit and maximization of capacity payments. All three McKee Run units are currently operating with the same vintage opacity monitoring equipment. The expectation is that all three systems will need to be replaced in the year's ahead. Our hopes are to spread the costs for total replacement over a three year period by using the replaced units as an additional source of spare parts for the existing units still in service. All three units are expected to be replaced by fiscal year 2010/11. This is the third and last unit to be replaced.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Potential for unit to be unavailable for operation resulting in forced outages and loss of capacity payments.

THIS PROJECT IS RELATED TO THE FOLLOWING:

EXPLANATION OF IMPACT ON OPERATING BUDGET:

TIME-LINE/CURRENT STATUS: Unit 2 replacement to be completed in fiscal year 2011.

COMMENTS: Delaying the completion of this project could result in the inability to comply with the Title V operating permit, resulting in increased forced outages and loss of income from capacity sales.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous			33,000					**33,000**
Other								
TOTAL			**33,000**					**33,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund			33,000					**33,000**
TOTAL			**33,000**					**33,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run Units 1 & 2 - Stack Repairs

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2011 - 2012

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: It may become necessary to repair the internal area of Units 1 & 2 common stack.

NEED, JUSTIFICATION, BENEFIT: Our current plans are to perform in-house inspections of the stack on an annual basis and to contract an internal inspection of the stack by outside contractors on an as needed basis to determine the need for repairs.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying necessary repairs could lead to more costly repairs in the future, simultaneous unplanned forced outages on both Units 1 & 2, fall out of internal material upon the surrounding community and potential injury to employees. Earnings from the sale of capacity may also be affected.

THIS PROJECT IS RELATED TO THE FOLLOWING: Continuous availability of operating Units 1 & 2.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Due to the reduced operation of Units 1 & 2 we have moved the project out to fiscal year 2012.Our plans to perform regular assessments of the internal damage to the common stack will determine when repairs may be necessary. Severe damage may move the repairs to an earlier date however the reduced run time of Units 1 & 2 may continue to afford us the ability to postpone repairs to a later date.

TIME-LINE/CURRENT STATUS: The current expectation is to perform the repairs in fiscal year 2012.

COMMENTS: A determination for the necessity of repairs to Units 1 & 2 common stack will be performed on an annual basis.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous				75,000				**75,000**
Other								
TOTAL				**75,000**				**75,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				75,000				**75,000**
TOTAL				**75,000**				**75,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run - Demineralizer Replacement

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2011 - 2012

PROJECT NO: 000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 2

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will evaluate the existing demineralizer with the expectation of replacing the control system. Evaluation will determine whether it is more cost effective to replace controls rather than replace the entire system. A value engineering study will be performed to make that determination. The project costs are based on controls system replacement only.

NEED, JUSTIFICATION, BENEFIT: The existing DI system is a 1960's vintage. Replacing of the existing controls or the DI system would improve reliability. Replacement Parts for our current system are becoming obsolete and hard to locate.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: : If we were to have a major problem with the demineralizer system, it could impact the unit run time and could result in a forced outage. Repairs requiring an extended outage of the demineralizer system would require having a portable demineraillizer brought in and temporarily hooked up until the repairs were made and the system put back in service.

THIS PROJECT IS RELATED TO THE FOLLOWING: Plant efficiency and reliability and for the plant.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget.

TIME-LINE/CURRENT STATUS: The project will perform an analysis of the equipment in 2010 and make recommendation for repair or replacement to be completed in 2011.

COMMENTS: The system has been reliable over its operating life, but parts are getting harder to find, and maintenance of the system controls is increasing. The cost identified assumes the replacement of the controls only.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous				65,000				**65,000**
Other								
TOTAL				**65,000**				**65,000**

FINANCING:

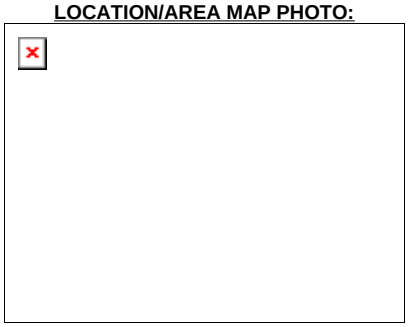
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				65,000				**65,000**
TOTAL				**65,000**				**65,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run Unit #1 Turbine Outage

LOCATION/AREA MAP PHOTO:



FISCAL YEAR : 2012

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: Inspect turbine to determine if any repairs are needed to keep the unit operational and to assess life of the unit. Assess repair quotes, if repairs are needed, to determine best available options.

NEED, JUSTIFICATION, BENEFIT: An assessment of the unit needs to be performed due to insufficient data or industry standards on cycling units to determine inspection and estimated repair frequency.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Possible catastrophic equipment failure.

THIS PROJECT IS RELATED TO THE FOLLOWING: The plant will attempt a borescope in 2008 to determine the internal conditions. If successful and conditions allow, this project can be scheduled for 2011. If the borescope results indicate conditions that are unacceptable, this project might need to be moved up or the unit retired.

EXPLANATION OF IMPACT ON OPERATING BUDGET:

TIME-LINE/CURRENT STATUS: Borescope will be attempted in 2008.

COMMENTS: Total project includes removing the turbine shell and inspection of all turbine parts including blades. McKee Run Units 1 and 2 are both scheduled for 2011 inspections in order to capitalize on common mobilization costs low. The project price is an estimated cost to perform the work. It would be possible to split this into one unit one year and one unit the next year, however there would be a slight increase in the expected cost for the two projects together.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous								
Other				500,000				**500,000**
TOTAL				**500,000**				**500,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				500,000				**500,000**
TOTAL				**500,000**				**500,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

Preservation of Structures

FISCAL YEAR S : 2012 - 2014

PROJECT NO: 00000

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 6

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project includes painting the plant structures along with the retirement of equipment placed out of service.

NEED, JUSTIFICATION, BENEFIT: Structural steel painting is needed in various areas throughout the plant proper as well as various outbuildings on the plant property to maintain the physical building structures and equipment in an acceptable condition. This project represents a minimum preservation and maintenance of structures consistent with the expected life of the station.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Deterioration of plant structures will accelerate if preservation is not done resulting in larger future costs associated with structural repairs.

THIS PROJECT IS RELATED TO THE FOLLOWING:

EXPLANATION OF IMPACT ON OPERATING BUDGET:

TIME-LINE/CURRENT STATUS: This work will be completed over several fiscal year budgets starting in 2012 and completing in 2014

COMMENTS: n/a

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction				38,000		42,000		**80,000**
Miscellaneous								
Other								
TOTAL				**38,000**		**42,000**		**80,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund				38,000		42,000		**80,000**
TOTAL				**38,000**		**42,000**		**80,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

VanSant Auxiliary Power Backup

FISCAL YEAR S : 2013 - 2013

PROJECT NO: 00

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will install a PV backup auxiliary power supply to the current system to provide supplemental power for auxiliary power requirements and offset utility supplied aux power.

NEED, JUSTIFICATION, BENEFIT: This project will provide a means of offsetting auxiliary power provided by the utility when the unit is on standby. In addition it can provide a means of charging station batteries during a black start operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Lost opportunity to offset auxiliary power costs.

THIS PROJECT IS RELATED TO THE FOLLOWING: Plant operating expenses.

EXPLANATION OF IMPACT ON OPERATING BUDGET: n/a

TIME-LINE/CURRENT STATUS: This project will be completed in 2013.

COMMENTS: The project funding will be utilize available State renewable energy funding where possible.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous					75,000			**75,000**
Other								
TOTAL					**75,000**			**75,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
State Grant					75,000			**75,000**
TOTAL					**75,000**			**75,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run Unit 3 Turbine Outage

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2014 - 2014

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: Inspect turbine to determine if any repairs are needed to keep the unit operational and to assess life of the unit. Assess repair quotes, if repairs are needed, to determine best available options.

NEED, JUSTIFICATION, BENEFIT: An assessment of the unit needs to be performed due to insufficient data or industry standards on cycling units to determine inspection and estimated repair frequency.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Possible catastrophic equipment failure and indefinite loss of unit availability.

THIS PROJECT IS RELATED TO THE FOLLOWING: The need for an internal inspection of Unit 3 turbine may be determined by the amount of hours that the unit operates in the years ahead and the efficiency of the unit during thos period of operation. Facility personnel will also invesitage the impact our our cyclic operation on the need for an internal inspections.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget.

TIME-LINE/CURRENT STATUS: Would expect this outage to occur during the spring outage of 2013.

COMMENTS: Total project includes removing the turbine shell and inspection of all turbine parts including blades. The project price is an estimated cost to perform the work no bids have been solicited at this time.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous								
Other						1,000,000		**1,000,000**
TOTAL						**1,000,000**		**1,000,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund						1,000,000		**1,000,000**
TOTAL						**1,000,000**		**1,000,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

McKee Run - Unit 3 Flux Probe

FISCAL YEAR S : 2014 - 2014

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 2

NEW PROJECT: Yes

PROJECT DESCRIPTION: Install a flux probe in MR unit 3 Generator.

NEED, JUSTIFICATION, BENEFIT: As large generators age, the incidents of failures related to turn to turn shorts in the generator field (rotor) increase. This flux probe is utilized to monitor the condition of the generator rotor and will identify turn to turn shorts in the generator field winding. This equipment is used extensively in the industry for early identification of such problems in the generator which could lead to a catastrophic failure.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: A potential failure of the generator field windings could result in an unplanned outage or lead to such extensive damage that would impact the continued viability of the unit to return to service.

THIS PROJECT IS RELATED TO THE FOLLOWING: This work must be done during a planned outage since it requires the disassembly of the generator to install the flux probe hardware.

EXPLANATION OF IMPACT ON OPERATING BUDGET: n/a

TIME-LINE/CURRENT STATUS: To be completed in the 2014 planned outage on unit 3.

COMMENTS: Project assumes that the unit generator disassembly and reassembly cost is included in the CIP project for the turbine generator inspection. The data from this flux probe will be used as a tool to help predict the useful life of the generator rotor.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous						60,000		**60,000**
Other								
TOTAL						**60,000**		**60,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund						60,000		**60,000**
TOTAL						**60,000**		**60,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Run - Unit 3 Cooling Tower Fill

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2014 - 2014

PROJECT NO: 00

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 3

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will replace all cooling tower fill and fill support systems on the McKee Run Unit 3 cooling tower. The replacement includes a new design to improve heat transfer and assure that the discharge temperature of the cooling tower continues to met regulatory requirements.

NEED, JUSTIFICATION, BENEFIT: The cooling tower fill is projected to be at end of life over the next several years and is expected to impact the cooling tower performance to an extent that it will also affect unit performance and will limit the unit full load capability. In order to extend the life of the plant, this replacement will be required.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Continued deterioration of the cooling tower performance will lead to load reductions on the unit during periods of high ambient temperatures. This will occur during the time period when generation costs are at their peak.

THIS PROJECT IS RELATED TO THE FOLLOWING: Plant efficiency and environmental compliance.

EXPLANATION OF IMPACT ON OPERATING BUDGET: Would expect this project to be funded outside the normal operating budget . This work will eliminate the need to make emergency repairs to the cooling tower fill as the fill fails.

TIME-LINE/CURRENT STATUS: Performance testing of the tower will be completed in 2010. Engineering and bid cycle to be completed in 2013. The installation work to be completed in 2014.

COMMENTS: n/a

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design						10,000		**10,000**
Land								
Construction								
Miscellaneous						440,000		**440,000**
Other								
TOTAL						**450,000**		**450,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund						450,000		**450,000**
TOTAL						**450,000**		**450,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

LOCATION/AREA MAP PHOTO:

McKee Run - Unit 3 Cooling Water Line Replacement

FISCAL YEAR S : 2014 - 2014

PROJECT NO: 0

CATEGORY: Electric

DEPARTMENT: Public Utilities - Power Plant

DEPT. RANKING: 4

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will replace the underground cooling water line from the Unit 3 condenser to the cooling tower. A condition assessment and life evaluation will be performed on this pipe to develop a repair/replace action plan to address the suitability for continued operation as well as extending the life of the piping beyond 2014.

NEED, JUSTIFICATION, BENEFIT: The condition of the underground cooling water line has required numerous repairs over the life of the plant and is expected to reach it's useful life in the 2012-2015 time period. It is expected that the repair frequency will accelerate over the next several years.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying this project beyond 2014 will increase the risk of a failure causing an extended unit outage to repair or replace the failed pipe. Additional budget dollars will need to be allocated to repair/ replace sections of piping.

THIS PROJECT IS RELATED TO THE FOLLOWING: Plant reliability. The work will be coordinated with the scheduled unit outage.

EXPLANATION OF IMPACT ON OPERATING BUDGET: We would expect this project to be funded outside the normal operating budget. Completion of the project as scheduled will eliminate the need to add additional O&M funding for emergency repairs in future years.

TIME-LINE/CURRENT STATUS: The condition assessment, engineering, and design will be completed in 2014 with the construction work to be completed in 2015.

COMMENTS: The results of the condition assessment will determine what action plan will be developed. The budgeted costs assume a replacement of the line from the cooling tower to the plant exterior wall.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design						40,000		**40,000**
Land								
Construction							550,000	**550,000**
Miscellaneous								
Other								
TOTAL						**40,000**	**550,000**	**590,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Electric I and E Fund						40,000	550,000	**590,000**
TOTAL						**40,000**	**550,000**	**590,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

WATER/WASTEWATER

EXPENDITURES

CATEGORY	TOTAL 5 YEAR COST	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Public Utilities - Wastewater Mgmt						
Miscellaneous Sewer System Improvements	185,000	33,000	35,000	37,000	39,000	41,000
US Route 13 West Sanitary Sewer Interceptor	3,201,480	3,201,480				
Inflow/Infiltration Removal	7,996,890	1,800,000	1,900,000	1,383,400	1,431,900	1,481,590
SCADA Equipment Technology Upgrade	425,200	79,300	82,100	84,900	87,900	91,000
Delaware State University Pumping Station Replacement	336,400	336,400				
Fox Hall/Retreat Force Main Rerouting	107,200	107,200				
Tar Ditch Interceptor Upgrade (WW)	518,230	518,230				
Acorn Lane Package Pump Station Replacement	336,400	336,400				
Delaware State University Force Main Rerouting	137,700	26,800	110,900			
Fox Hall Pump Station Rehabilitation	427,900	52,000	375,900			
Heatherfield Pumping Station Upgrade	220,400	40,000	180,400			
Dover East Pump Station Abandonment & Sewer Line	265,800		52,000	213,800		
Brandywine Package Pump Station Replacement	414,400		54,000	360,400		
Lepore Road Pump Station Replacement	395,000		70,000	325,000		
Baltray Pumping Station Replacement	145,000			45,000	100,000	
Dover Brook Gardens Pump Station Upgrade	75,000			25,000	50,000	
Rolling Acres Pumping Station Replacement	429,000			56,000	373,000	
McKee Road Pumping Station Communator Replacement	70,000			25,000	45,000	
Delaware Tech Pumping Station Replacement	474,800				58,000	416,800
Westover Pumping Station and Force Main Upgrade	578,600				85,000	493,600
Turnberry Force Main Redirect	506,000				45,000	461,000
Lakeview Drive Pumping Station Replacement	46,600					46,600
Schoolview Pumping Station Force Main Redirect	40,000					40,000
Silver Lake Pumping Station Replacement/Upgrade	77,000					77,000
Subtotal	***17,410,000***	***6,530,810***	***2,860,300***	***2,555,500***	***2,314,800***	***3,148,590***
Public Utilities - Water Mgmt						
Remote Control and Monitor Wells	55,000	55,000				
Water Quality Improvements	16,053,200	2,804,600	3,197,100	3,381,100	3,233,500	3,436,900
Miscellaneous Distribution System Improvements	375,000	65,000	70,000	75,000	80,000	85,000

Wellhead Redevelopment Program	325,000	55,000	60,000	65,000	70,000	75,000
Piney Point Well	665,000	215,000	450,000			
1.0 MG Elevated Water Storage Tower	3,340,000	750,000	2,590,000			
Emergency Generators (Wells)	150,000			150,000		
Water Treatment Plant Process Improvements	246,200				75,000	171,200
Future Columbia Well Installation	196,400				25,000	171,400
Subtotal	***21,405,800***	***3,944,600***	***6,367,100***	***3,671,100***	***3,483,500***	***3,939,500***
TOTAL	**38,815,800**	**10,475,410**	**9,227,400**	**6,226,600**	**5,798,300**	**7,088,090**

REVENUE

REVENUE SOURCE	TOTAL 5 YEAR COST	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Water/Wastewater Fund	21,472,290	222,300	3,426,200	5,102,400	5,718,300	7,003,090
Bond Financing	11,924,280	8,884,280	3,040,000			
Capital Asset Reserve	482,900	107,000	375,900			
Other	54,510	54,510				
Impact Fee Reserve	4,731,820	1,207,320	2,385,300	974,200	80,000	85,000
Homeland Security Grant	150,000			150,000		
TOTAL	**38,815,800**	**10,475,410**	**9,227,400**	**6,226,600**	**5,798,300**	**7,088,090**

Miscellaneous Sewer System Improvements

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2007 - 2014

PROJECT NO: WW0808

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: This project will primarily address emergency sewer main repairs. In addition, it will repair deteriorating lines. These funds can also be used to partner with private developers to oversize future mains or to install associated improvements to meet the long term goals of the utility.

NEED, JUSTIFICATION, BENEFIT: These funds are necessary to address failing or deteriorated infrastructure where City crews are replacing old water mains through the miscellaneous water system improvement project. Missing opportunities to oversize or reroute mains will result in higher construction costs in the future.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project will result in reduced ability to properly address breaks or to expand the system.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: This is an ongoing annual program. We identify, plan, and construct improvements each year and address emergency repairs as they occur.

COMMENTS: Emergency repairs are typically performed by private contractors. Work on planned projects will be done using in-house construction crews, and costs are for materials to make improvements only. All cost for oversizing will be paid through negotiated cost and public utilities agreements.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	101,500	33,000	35,000	37,000	39,000	41,000	43,000	**329,500**
Miscellaneous	40,000							**40,000**
Other								
TOTAL	**141,500**	**33,000**	**35,000**	**37,000**	**39,000**	**41,000**	**43,000**	**369,500**

FINANCING:

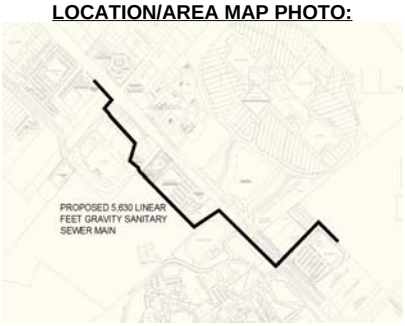
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund	141,500	33,000	35,000	37,000	39,000	41,000	43,000	**369,500**
TOTAL	**141,500**	**33,000**	**35,000**	**37,000**	**39,000**	**41,000**	**43,000**	**369,500**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

US Route 13 West Sanitary Sewer Interceptor

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2007 - 2010

PROJECT NO: WW0810

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 4

NEW PROJECT: No

PROJECT DESCRIPTION: This project will construct approximately 5,630 linear feet of various diameter gravity sewer from the entrance road to Dover Downs, Inc. to the west end of West Rustic Lane. Sewer diameters included in this project consist of 12-inch, 24-inch and 27-inch.

NEED, JUSTIFICATION, BENEFIT: The proposed gravity sewer interceptor will allow the City to abandon the existing Schwartz Pumping Station immediately adjacent to US RT 13. If the gravity sewer is not constructed, the Schwartz Pumping Station must be reconstructed due to its age. Access to the existing Schwartz Station is limited which will make reconstructing the existing Schwartz Station extremely difficult. The life cycle costs of the proposed gravity sewer interceptor are significantly less than reconstructing the pumping station, even though the initial construction costs are higher. In addition, the gravity sewer interceptor will allow further gravity sewer extensions to the surrounding area which will allow redevelopment of properties on the west side of US RT 13. These properties are currently under utilized due to lack of public sewer. This project is also necessary to redirect flow to the US RT 13 gravity basin and relieve problems at Kent County Station #2. This would be accomplished through the future redirecting of force mains from the Delaware State university, Delaware Tech and McKee Pumping Stations. This project will also extend sewer to the proposed Civic Center property.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The existing Schwartz Pumping Station will need major renovations estimated at $800,000. The existing sewer system will be unable to handle growth within the area including the proposed Civic Center. Delaying or eliminating this project will also result in an extended reliance on Kent County Station #2 which is located on Denny's Road across from Delaware Tech Campus.

THIS PROJECT IS RELATED TO THE FOLLOWING: Pump Station and Sewer Basin Study, Central Transmission Bypass Project (Kent County), Civic Center.

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Approximately 1,000 linear feet of 27-inch gravity sewer was installed in FY 2007. Design, alignment and easement acquisition to be completed in FY 2009. Construction to be completed in FY 2010.

COMMENTS: $150,000 has been added for construction inspection services.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design	264,815							**264,815**
Land	10,000							**10,000**
Construction	330,000	3,201,480						**3,531,480**
Miscellaneous								
Other								
TOTAL	**604,815**	**3,201,480**						**3,806,295**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Bond Financing	604,815	3,201,480						**3,806,295**
TOTAL	**604,815**	**3,201,480**						**3,806,295**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Inflow/Infiltration Removal

FISCAL YEAR S : 2009 - 2014

PROJECT NO: WW0903

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 2

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



SANITARY SEWER INFLOW AND INFILTRATION (I & I) PROBLEMS

PROJECT DESCRIPTION: The project will identify and correct areas in the sanitary sewer collection system that are deteriorating and allowing groundwater to enter the sanitary sewer system through cracked pipes and/or joints. In addition, video investigation will help identify sump pump and other illicit connections to the system which will have to be removed by individual property owners. In conjunction with the Water Quality Improvements Project, the areas that are being replaced will be investigated for sanitary sewer main condition. If determined that further inspection is required, our in-house staff will conduct additional TV inspections to the sanitary sewer main. Based on results of the investigation, improvements may need to be made to the system.

NEED, JUSTIFICATION, BENEFIT: The wet weather experienced in 2003, highlighted the fact that we have an aging wastewater system that requires more attention to the condition of the old pipe network and more monitoring of illicit connections to the system. Inflow and infiltration are problems that all customers pay for since they are costs that are not assigned to an individual customer. Therefore, all customers are affected by expenses related to inflow and infiltration.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project will result in continued higher treatment charges for wastewater flow to Kent County than is necessary. In addition, the reduction in available capacity in the City and county systems due to inflow and infiltration will reduce the capacity available for future growth.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: The project will reduce the operating budget over time due to the reduction in costs for sewage treatment paid to Kent County. All savings are cumulative.

TIME-LINE/CURRENT STATUS: Investigation and program development occurred in Fiscal Year 2005; project scoping occured in Fiscal Year 2006; video inspection and testing of pipe occurred in Fiscal Years 2006 and 2007 and will be performed by in-house crews starting in FY 2009; relining/replacement of pipe/ disconnects will occur in Fiscal Years 2009 through 2014.

COMMENTS: In the first five months of Fiscal Year 2004, the Kent County Wastewater Adjustment Charge was approximately $68,454 over the target budget per month. In Fiscal Year 2005, City Council approved a $.45/Tgal rate increase on the City's sewer rate to compensate for this problem. Inflow and infiltration created an additional budget deficit of $68,890 through the first quarter of Fiscal Year 2005. The project will reduce the operating budget over time due to the reduction in costs for sewage treatment paid to Kent County.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design	139,000			83,400	86,400	89,000	91,700	**489,500**
Land								
Construction	486,000	1,800,000	1,900,000	1,300,000	1,345,500	1,392,590	1,441,330	**9,665,420**
Miscellaneous								
Other								
TOTAL	**625,000**	**1,800,000**	**1,900,000**	**1,383,400**	**1,431,900**	**1,481,590**	**1,533,030**	**10,154,920**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund	350,000			1,383,400	1,431,900	1,481,590	1,533,030	**6,179,920**
Bond Financing	275,000	1,800,000						**2,075,000**
Impact Fee Reserve			1,900,000					**1,900,000**
TOTAL	**625,000**	**1,800,000**	**1,900,000**	**1,383,400**	**1,431,900**	**1,481,590**	**1,533,030**	**10,154,920**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

SCADA Equipment Technology Upgrade

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2009 - 2014

PROJECT NO: WW0901

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 3

NEW PROJECT: No

PROJECT DESCRIPTION: This project involves the replacement of antiquated and/or obsolete remote terminal units (RTUs) at sewage pumping stations with new up-to-date serviceable SCADA equipment. Microwave radios, antennas and enclosures would be upgraded as needed. The RTU and radio are the reporting equipment for the SCADA system (Supervisory Control and Data Acquisition) which reports, on a constant basis, the status of alarms at the City's pumping stations. The RTUs that are being replaced are outdated and unable to be repaired. Most of the equipment is installed in two steel cabinets mounted outside and are corroding. The new equipment is installed within a single fiberglass NEMA 4 enclosure.

NEED, JUSTIFICATION, BENEFIT: Replace failing antiquated equipment with completely new alarm reporting equipment to provide reliable SCADA system reporting and to prevent the need for costly non budgeted emergency repairs.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Lack of alarms resulting in costly sewer backup claims. A RTU or radio failure would provide no advance warning of a failure resulting in costly sewer backup claims or sewage overflows into waterways. Equipment would become old, not supported, and obsolete.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Each Year: order equipment and construct cabinets and back-plates by December; complete installation by June.

COMMENTS: Currently, the purchase of this equipment has had to come out of the operation budget to replace equipment as it fails. Lack of alarms resulting in costly sewer backup claims.It is estimated that five stations will be upgraded each year.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	28,500	15,000	15,500	16,000	16,600	17,200	17,900	**126,700**
Miscellaneous	122,100	64,300	66,600	68,900	71,300	73,800	76,400	**543,400**
Other								
TOTAL	**150,600**	**79,300**	**82,100**	**84,900**	**87,900**	**91,000**	**94,300**	**670,100**

FINANCING:

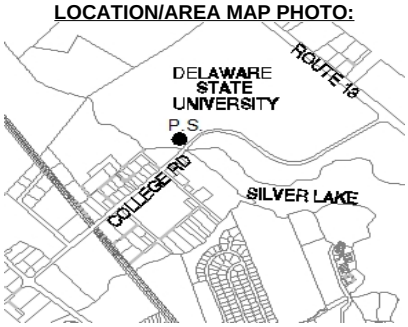
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund	150,600	79,300	82,100	84,900	87,900	91,000	94,300	**670,100**
TOTAL	**150,600**	**79,300**	**82,100**	**84,900**	**87,900**	**91,000**	**94,300**	**670,100**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Delaware State University Pumping Station Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2009 - 2010

PROJECT NO: WW0902

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 5

NEW PROJECT: No

PROJECT DESCRIPTION: The proposed project includes the replacement of the Smith & Loveless package capsular pumping station and wet well replacement/relocation installed in 1975. The below grade capsular station will be replaced with a wet well mounted package pumping station eliminating a confined space entry requirement. The station is located at the rear of Delaware State University campus adjacent to Silver Lake. The station has exceeded its anticipated life expectancy of 20-25 years. This project is anticipated to provide the capacity required for growth of the campus.

NEED, JUSTIFICATION, BENEFIT: Replace the aged station with a completely new station to prevent the need for costly non budgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in Fiscal Year 2009; install in Fiscal Year 2010.

COMMENTS: This station was installed by Kent County to serve the Delaware State University in the mid 1970's and transferred to the City in the late 1990's. The basin collection area includes College Road from the railroad tracks to Silver Lake and all of the University except the new University Village apartments on College Road. The station is located approximately 300 feet from Silver Lake. 50% WW reserve funding

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design	50,000							**50,000**
Land								
Construction		336,400						**336,400**
Miscellaneous								
Other								
TOTAL	**50,000**	**336,400**						**386,400**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Bond Financing	25,000	168,200						**193,200**
Impact Fee Reserve	25,000	168,200						**193,200**
TOTAL	**50,000**	**336,400**						**386,400**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Fox Hall/Retreat Force Main Rerouting

FISCAL YEAR S : 2009 - 2010

PROJECT NO: WW0905

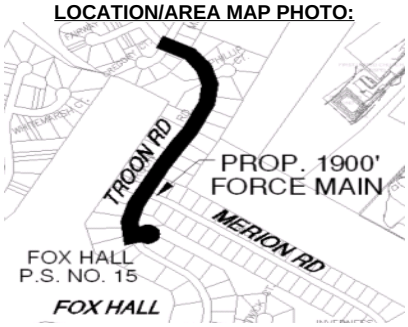
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 7

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project was identified in the Wastewater Master Plan Technical Documents and will reroute approximately 1,600 linear feet of six-inch and eight-inch force main exiting the Fox Hall and Retreat Pump Station. Rerouting will direct sewer currently flowing into the Walker Road basin.

NEED, JUSTIFICATION, BENEFIT: Transfer of flow from the Walker Road basin to the McKee Road basin will reduce future costs at the Walker Road Pump Station and Kent County P.S. #3 as well as better utilization of the McKee Road infrastructure.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in continued stress on the Walker Road Pump Station in addition to increased costs for the upgrades to the Walker Road Pump Station.

THIS PROJECT IS RELATED TO THE FOLLOWING: Fox Hall Pump Station Rehabilitation Project, and Kent County Central Transmission Project

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Designed in FY 2009, construction in FY 2010.

COMMENTS: Rerouting of the force main will allow for the Walker Road Pump Station to function through the 20-year planning period outlined in the 1999 Wastewater Plan Technical Documents. Current alignment proposal will utilize road right-of-way to minimize need for private easements. Work is to be completed by in-house construction.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design	32,000							**32,000**
Land								
Construction		107,200						**107,200**
Miscellaneous								
Other								
TOTAL	**32,000**	**107,200**						**139,200**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve	32,000	107,200						**139,200**
TOTAL	**32,000**	**107,200**						**139,200**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Tar Ditch Interceptor Upgrade (WW)

LOCATION/AREA MAP PHOTO:

FISCAL YEAR S : 2010 - 2011

PROJECT NO: 0

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 0

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project will replace 515 feet of undersized fifteen-inch (15") pipe, between S. State Street and PW2 with twenty-four inch (24") pipe.

NEED, JUSTIFICATION, BENEFIT: This project was originally indentified in the 1999 Wastewater Master Plan. It was shown that pipe within the subject area was at 98% load at the time of the study and it was projected to be exceeded within five (5) years. Due to significant decreases in industrial water usage / wastewater discharge in the basin, as well as the overall cost and complexity of the basin, this project was placed on hold until it could be reanalyzed with the 2009 Wastewater Master Plan. It has been identified by staff that the subject pipe is flowing nearly full which caused a surcharge in upstream piping, particular during peak flow periods. This project will allow for the proper capacity to handle current flow as well to allow for growth.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project will result in preventing growth, or a net change of flow, within the basin.

THIS PROJECT IS RELATED TO THE FOLLOWING: 1999 and 2009 Wastewater Master Plans, Redevelopment

EXPLANATION OF IMPACT ON OPERATING BUDGET: n/a

TIME-LINE/CURRENT STATUS: Engineering/design and construction to be completed in FY 2010.

COMMENTS: Due to environmental issues, including groundwater levels, this project will utilize a design consultant as well as an outside contractor to perform the work required.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		100,000						**100,000**
Land								
Construction		418,230						**418,230**
Miscellaneous								
Other								
TOTAL		**518,230**						**518,230**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve		518,230						**518,230**
TOTAL		**518,230**						**518,230**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Acorn Lane Package Pump Station Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR : 2010

PROJECT NO: WW0907

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 6

NEW PROJECT: No

PROJECT DESCRIPTION: This project involves the replacement of the Smith & Loveless package pumping station installed in 1978 with the construction of the Independence Village Subdivision. The station has exceeded its life expectancy of 20-25 years. The capacity will shortly be exceeded with the addition of 500 new contributing homes (Patriot Village, Lexington Glenn, and Clearview Meadow). This project is anticipated to be completed utilizing an outside contractor.

NEED, JUSTIFICATION, BENEFIT: Replace the aged station with a completely new station to prevent the need for costly non budgeted repairs to maintain operation. Over the years the City of Dover has had to hire contractors to replace check valves and piping within the pumping station.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: A loss of capacity or failure resulting in backups into the collection system; pump failure resulting in a sewage spill into waterways or backups in residences. Because of the age of the station, certain parts are no longer obtainable, and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: The Kent County Central Transmission Bypass (CTB), White Oak Farms Pumping Station VFDs

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid project in FY 2009; construction in FY 2010.

COMMENTS: This station is related to the Kent County Central Transmission Bypass because it will have to be directed in the bypass to recover lost capacity at the White Oak Farms pumping station. The Acorn Lane Pumping Station currently discharges to the White Oak Farms pumping station. When the White Oak Farms station is directed into the CTB, capacity is anticipated to decrease due to the change in discharge pressures. Flows will be directed in the CTB by pumping around the White Oak Pumping Station and removing the need of re-pumping by White Oak Farms. 85% WW Impact Fee funding.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design	27,000							**27,000**
Land								
Construction		336,400						**336,400**
Miscellaneous								
Other								
TOTAL	**27,000**	**336,400**						**363,400**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve	27,000	281,890						**308,890**
Other		54,510						**54,510**
TOTAL	**27,000**	**336,400**						**363,400**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Delaware State University Force Main Rerouting

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2011

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 8

NEW PROJECT: No

PROJECT DESCRIPTION: This project was identified in the Wastewater Master Plan Technical Documents and will reroute approximately 2,750 linear feet of eight-inch force main exiting from the Delaware State University Pump Station. The new force main will discharge into the upstream end of the new Rt. 13 Sanitary Sewer Interceptor at the end of West Rustic Lane. This project will entail the installation of approximately 750 feet of new eight-inch force main. Due to the requirements of this project, it will also include the rerouting of the Delaware Tech. force main through reverse flow utilizing the existing force main.

NEED, JUSTIFICATION, BENEFIT: Rerouting the existing force main from the Delaware State University Pump Station and the Delaware Tech. Pump Station will significantly reduce the total length of force main from the station and will reroute flows to City of Dover infrastructure. Flows from the pump stations will no longer discharge into Kent County Station #2.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in continued stress on downstream infrastructure.

THIS PROJECT IS RELATED TO THE FOLLOWING: Route 13 Sanitary Sewer Interceptor

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design in Fiscal Year 2010; construction in Fiscal Year 2011.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		26,800						**26,800**
Land								
Construction			110,900					**110,900**
Miscellaneous								
Other								
TOTAL		**26,800**	**110,900**					**137,700**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve		26,800	110,900					**137,700**
TOTAL		**26,800**	**110,900**					**137,700**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Fox Hall Pump Station Rehabilitation

FISCAL YEAR S : 2010 - 2011

PROJECT NO: x

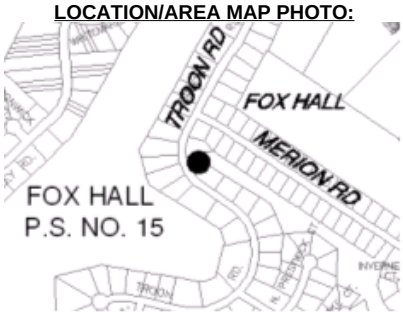
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 9

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project will completely rehabilitate the wet well side of the pump station using the poly-triplex system liner. In addition, it will include the replacement of the pump station to a wet well mounted package pump station. This station was constructed in 1971 and has exceeded its life expectancy of 20-25.

NEED, JUSTIFICATION, BENEFIT: The wet well has deteriorated due to age and is subject to groundwater infiltration. This project was identified in the Wastewater Master Plan Technical Documents. Replace the aged station to prevent the need for costly repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project will result in the continued deterioration of the station and increased costs of Kent County treatment charges due to groundwater infiltration and those on Acorn Lane Pumping Station. Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: Fox Hall/Retreat Force Main Rerouting

EXPLANATION OF IMPACT ON OPERATING BUDGET: This project will slightly reduce the operating budget by reducing inflow/infiltration into the wet well. Inflow/infiltration reduction equates to a reduction in our treatment costs with Kent County due to a reduced quantity of flow.

TIME-LINE/CURRENT STATUS: Design and bid project in 2010; construct in 2011.

COMMENTS: None

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		52,000						**52,000**
Land								
Construction			375,900					**375,900**
Miscellaneous								
Other								
TOTAL		**52,000**	**375,900**					**427,900**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Capital Asset Reserve		52,000	375,900					**427,900**
TOTAL		**52,000**	**375,900**					**427,900**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Heatherfield Pumping Station Upgrade

FISCAL YEAR S : 2010 - 2011

PROJECT NO: x

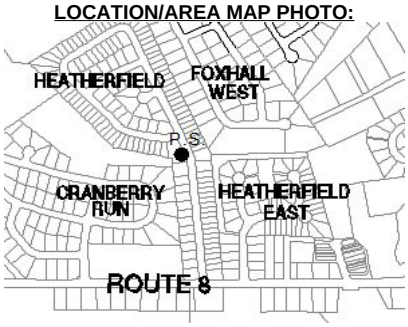
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 10

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project calls for replacement of approximately 1,200 linear of existing four inch force main with six inch force main and downsizing the existing impellers to increase the capacity of the station to over 200 gallons per minute.

NEED, JUSTIFICATION, BENEFIT: Upgrade the force main to meet the capacity requirements incurred by the previous extension and development of the collection basin.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: The Wastewater Facilities Master Plan of 1998.

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Project needs to be performed in advance of the pumping station replacement.

COMMENTS: The station is a Smith & Loveless wet well mounted package pumping station installed in 1985 with the construction of the Heatherfield Subdivision. The station is approaching its life expectancy of 20-25 years, but is a new style station in that all mechanical and electrical equipment is above grade and accessible for routine maintenance and parts replacement. The capacity of the pumping station was exceeded with the connection of the Heatherfield East, Cranberry Run, and a portion of Fox Hall West Addition subdivisions. The current capacity utilization is 125 percent. These improvements will lower the utilization to 75 percent. The force main upgrade needs to be completed prior to the to the station replacement in the upcoming out years.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		40,000						**40,000**
Land								
Construction			180,400					**180,400**
Miscellaneous								
Other								
TOTAL		**40,000**	**180,400**					**220,400**

FINANCING:

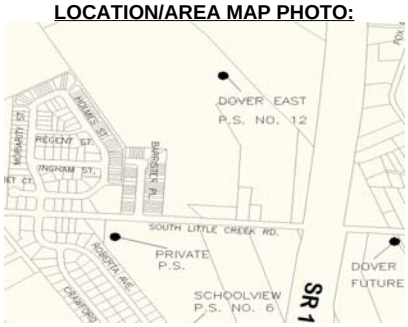
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve		40,000	180,400					**220,400**
TOTAL		**40,000**	**180,400**					**220,400**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Dover East Pump Station Abandonment & Sewer Line

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2011 - 2012

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 7

NEW PROJECT: No

PROJECT DESCRIPTION: The proposed project includes the abandonment and removal of the existing Smith & Loveless package capsular pumping station. This scope of work will also include the removal of the existing wet well. The station will be eliminated due to the construction to occur on the Rojan Meadows Subdivision site. Sanitary sewer with East Dover MHP will connect to the new Rojan Meadows pump station by installing approximately 400 lf of 12" gravity sanitary sewer. The existing Dover East station has exceeded its anticipated life expectancy of 20-25 years and the removal of this station can be justified because of the pump station being constructed at the Rojan Meadows Subdivision site. The pump station at Rojan Meadows will be sized to handle the Dover East wastewater and will discharge directly into the Central Transmission Bypass.

NEED, JUSTIFICATION, BENEFIT: The removal of the existing pump station will prevent the need for maintenance, and costly repairs to the system. The gravity sanitary sewer line will be beneficial to the City of Dover because of the low maintenance costs compared to the costs of maintaining and operating the existing pump station.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the station, certain parts are no longer obtainable, and replacement of equipment is costly. Continuation of increased operation and maintenance costs.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid project by 2010; construct by 2011.

COMMENTS: This station was installed with the development of the East Dover Mobile Home Park in 1973.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design			52,000					**52,000**
Land								
Construction				213,800				**213,800**
Miscellaneous								
Other								
TOTAL			**52,000**	**213,800**				**265,800**

FINANCING:

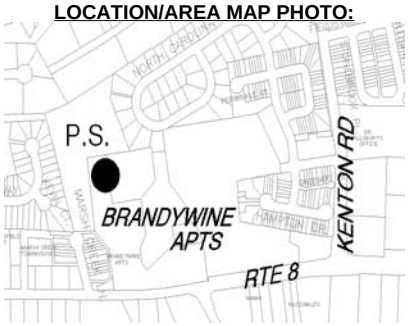
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund			52,000					**52,000**
Impact Fee Reserve				213,800				**213,800**
TOTAL			**52,000**	**213,800**				**265,800**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Brandywine Package Pump Station Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2011 - 2012

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 8

NEW PROJECT: No

PROJECT DESCRIPTION: The proposed project includes the replacement of the Smith & Loveless package pumping station installed in 1977. The station has exceeded its life anticipated expectancy of 20-25 years and is in need of a capacity upgrade due to the increased growth in the basin. This project is anticipated to utilize an outside contractor to replace the pumping station, electrical service panel, and SCADA equipment.

NEED, JUSTIFICATION, BENEFIT: Replace the aged station with a completely new station to prevent the need for costly non budgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2011; construction in FY 2012.

COMMENTS: This station was installed for the Dover Country Club Apartments when City sewer was made available to this area. The site was previously outside the City's service area and had its own on site sewer treatment system. Over the life span of this station, it has seen increased flows with the construction of Mallard Pond, Marsh Creek, and Westwind Meadows, and the extension of service to Fox Hall Drive as well as possible infiltration. Based on the monthly runtime hours, the station is currently operating at 130 percent of desired capacity. Staff has observed numerous pump clogs and failures in the past years. The Dover Country Club and Brandywine Condo sewer lines are old and possibly influenced by infiltration.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design			54,000					**54,000**
Land								
Construction				360,400				**360,400**
Miscellaneous								
Other								
TOTAL			**54,000**	**360,400**				**414,400**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve			54,000	360,400				**414,400**
TOTAL			**54,000**	**360,400**				**414,400**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Lepore Road Pump Station Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2011 - 2012

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 9

NEW PROJECT: No

PROJECT DESCRIPTION: An upgrade of this station was identified in the Wastewater Master Plan Technical Documents, and the current proposal is to completely replace the aging station with a new Smith & Loveless Station. In addition, approximately 1,000 linear feet of gravity sewer main from Silver Mill Apartments to the existing station.

NEED, JUSTIFICATION, BENEFIT: The existing pumps are over sized and inefficient. Therefore, new pumps will be sized for the correct capacity of the wet well. The brick wet well is subject to the groundwater infiltration.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in the continued deterioration of the infrastructure necessitating the need for more extensive repairs in the future. Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in Fiscal Year 2011; construction in Fiscal Year 2012.

COMMENTS: This project will have a slight positive impact on our Inflow and Infiltration problem. In addition, $50,000 has been added for construction inspection services.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design			70,000					**70,000**
Land								
Construction				325,000				**325,000**
Miscellaneous								
Other								
TOTAL			**70,000**	**325,000**				**395,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve			70,000	325,000				**395,000**
TOTAL			**70,000**	**325,000**				**395,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Baltray Pumping Station Replacement

FISCAL YEAR S : 2012 - 2013

PROJECT NO: x

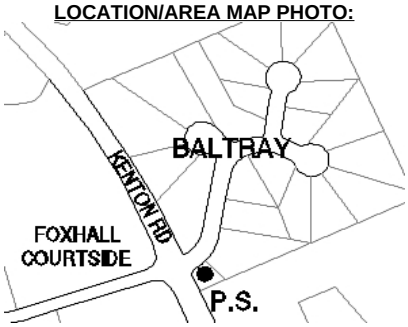
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 7

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: The proposed project includes the replacement of the grinder pumping station installed with the construction of the Baltray Subdivision in 1988. The station is approaching its anticipated life expectancy of 20-25 years. The grinder pumps, rail system and electric controls will be replaced.

NEED, JUSTIFICATION, BENEFIT: Replace the aging station with a completely new station to prevent the need for costly non budgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Due to the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid equipment in FY 2012; construction in FY 2013.

COMMENTS: Grinder pumps require periodic repairs and replacement to maintain efficient operation. During previous pump removals, staff has noticed leaking seals and instability in the rail system for the pumps due to corrosion.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design				45,000				**45,000**
Land								
Construction					100,000			**100,000**
Miscellaneous								
Other								
TOTAL				**45,000**	**100,000**			**145,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund				45,000	100,000			**145,000**
TOTAL				**45,000**	**100,000**			**145,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Dover Brook Gardens Pump Station Upgrade

FISCAL YEAR S : 2012 - 2013

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 8

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project would construct a force main priming loop to insure adequate back pressure is provided to the check valves to maintain prime on the vacuum primed Smith & Loveless pumps and upgrade to maintain or increase capacity. The loop is to create a high point in the force main above the pumps to provide a column of water against the check valves. The existing force main was originally installed with a constant slope away from the station to the receiving gravity sewer manhole. The force main drains by gravity away from the check valves providing very little static water pressure to hold check valves closed.

NEED, JUSTIFICATION, BENEFIT: Reduce maintenance time of cleaning check valves weekly and on-call or over time pay when the pumps lose prime

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2012; construction in FY 2013.

COMMENTS: Staff has observed numerous high wet well alarms due pump loss of prime. Construction to be provided by in-house crew.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design				25,000				**25,000**
Land								
Construction					50,000			**50,000**
Miscellaneous								
Other								
TOTAL				**25,000**	**50,000**			**75,000**

FINANCING:

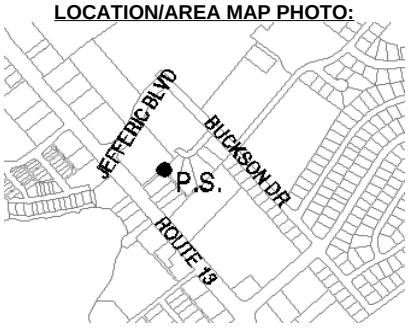
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund				25,000	50,000			**75,000**
TOTAL				**25,000**	**50,000**			**75,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Rolling Acres Pumping Station Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2012 - 2013

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 9

NEW PROJECT: No

PROJECT DESCRIPTION: This project calls for replacement of the Smith & Loveless package pumping station installed in 1973 in order to handle the commercial areas from Harrington Realty Shopping Center to the Howard Johnson Hotel. The station has exceeded its life anticipated expectancy of 20-25 years and is in need of a capacity upgrade due to the high peak inflow rates.

NEED, JUSTIFICATION, BENEFIT: Replace the aged station with a completely new station to prevent the need for costly unbudgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterway or backup in a residence. Due to the age of the station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2012; construction in FY 2013.

COMMENTS: This station experiences periods of high inflow rates due to the hotel occupancey and is susceptible to possible inflow/infiltration. Staff has observed numerous pump high wet well alarms due to high inflows and increased runtimes during wet months.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design				56,000				**56,000**
Land								
Construction					373,000			**373,000**
Miscellaneous								
Other								
TOTAL				**56,000**	**373,000**			**429,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund				56,000	373,000			**429,000**
TOTAL				**56,000**	**373,000**			**429,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

McKee Road Pumping Station Communator Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2012 - 2013

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 10

NEW PROJECT: No

PROJECT DESCRIPTION: The proposed project includes the replacement of the communator at the influent line to the pumping station installed in 1995. This acts as a screen/grinder at the influent side of the station cutting or stopping large debris from entering the wet well and clogging the pumps. The communator motor has run 24/7 since the initial startup of the pumping station.

NEED, JUSTIFICATION, BENEFIT: Replace the aging equipment to prevent the need for costly unbudgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Unbudgeted costly repairs to communator and damage to a pump when failure occurs. Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2012; construction in FY 2013.

COMMENTS: None

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design				25,000				**25,000**
Land								
Construction					45,000			**45,000**
Miscellaneous								
Other								
TOTAL				**25,000**	**45,000**			**70,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund				25,000	45,000			**70,000**
TOTAL				**25,000**	**45,000**			**70,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Delaware Tech Pumping Station Replacement

FISCAL YEAR S : 2013 - 2014

PROJECT NO: x

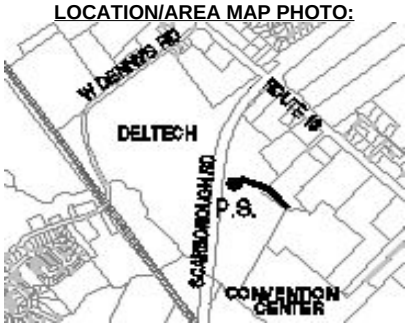
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 8

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: The proposed project includes the replacement of the Smith & Loveless package capsular pumping station and wet well replacement/relocation installed in 1975. The below-grade capsular station will be replaced with a wet well mounted package pumping station eliminating a confined space entry requirement. The station is located at the rear of the Delaware Tech campus on the corner of Scarborough Road and Crawford Carroll Avenue. The station has exceeded its anticipated life expectancy of 20-25 years.

NEED, JUSTIFICATION, BENEFIT: Replace the aged station with a completely new station to prevent the need for costly unbudgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: Route 13 Interceptor Sewer, and the Kent County Central Transmission Bypass (CTB).

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2013; construction in FY 2014.

COMMENTS: This station was installed by Kent County to serve the Delaware Tech and Delaware State University campuses in the mid 1970s and transferred to the City in the late 1990s. The pumping station handles the Delaware Tech Terry Campus complex.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design					58,000			**58,000**
Land								
Construction						416,800		**416,800**
Miscellaneous								
Other								
TOTAL					**58,000**	**416,800**		**474,800**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund					58,000	416,800		**474,800**
TOTAL					**58,000**	**416,800**		**474,800**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Westover Pumping Station and Force Main Upgrade

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2013 - 2014

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 9

NEW PROJECT: No

PROJECT DESCRIPTION: The proposed project includes the upgrade of the Smith & Loveless pumping station and force main installed in 1994. The pump station's available capacity will be consumed with the build out of the Village of Cannon Mills and will be in need of additional capacity in order to be able receive additional flow from the west. The project will include replacement of interior six inch suction and discharge piping with eight-inch pipe, upgrade 1,400 feet of six-inch force main to 12-inch diameter pipe from the station to Electric Avenue.

NEED, JUSTIFICATION, BENEFIT: Provide adequate capacity to receive additional sewage flow from the immediate vicinity due to development and annexation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Possible pipe rupture due to high head pressures and water hammer. A rupture could cause the station to flood, damaging the motors and controls or spilling raw sewage into the Puncheon Run stream.

THIS PROJECT IS RELATED TO THE FOLLOWING: Comprehensive Plan Update.

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2013; construction in FY 2014.

COMMENTS: None

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design					85,000			**85,000**
Land								
Construction						493,600		**493,600**
Miscellaneous								
Other								
TOTAL					**85,000**	**493,600**		**578,600**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund					85,000	493,600		**578,600**
TOTAL					**85,000**	**493,600**		**578,600**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Turnberry Force Main Redirect

FISCAL YEAR S : 2013 - 2014

PROJECT NO: x

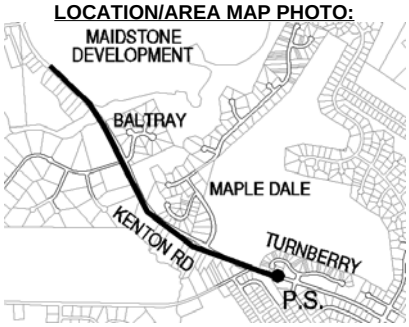
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 10

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project will redirect the sanitary sewage handled by the Turnberry Pumping Station to the McKee Pumping Station drainage basin where it can be re-pumped into the Central Transmission Bypass(CTB). Project consists of approximately 6,000 linear feet of eight-inch force main from the Turnberry Station to Mudstone Interceptor in the Maidstone Subdivision at the intersection of Denney's and Kenton Roads. The project will require a rotating assembly change to increase the motor horsepower and pump rate.

NEED, JUSTIFICATION, BENEFIT: To provide adequate pump rates to meet the demand of new development in this basin and minimize backups in the receiving gravity sewers, the high flows added need to be redirected. This allows for more efficient utilization of the McKee Pumping Station and reduces the chance of a backup of sewer into basements due to the current layout.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Continued stress on the Walker Road pumping station.

THIS PROJECT IS RELATED TO THE FOLLOWING: This project is in line with the Kent County Central Transmission Bypass (KCCTB) project to redirect flows away from the Downtown drainage basin and Kent County Pumping Station #2.

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2013; construction in FY 2014.

COMMENTS: This project is primarily dependent of the development in this area. The receiving sewer downstream of the Turnberry Station is nearing capacity with the increased discharges within the Turnberry collection basin.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design					45,000			**45,000**
Land								
Construction						461,000		**461,000**
Miscellaneous								
Other								
TOTAL					**45,000**	**461,000**		**506,000**

FINANCING:

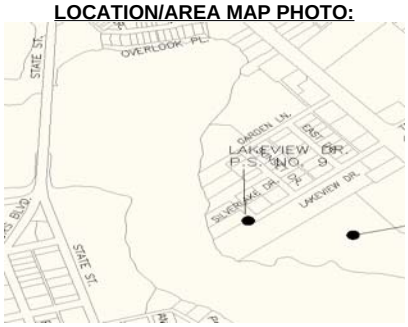
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund					45,000	461,000		**506,000**
TOTAL					**45,000**	**461,000**		**506,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Lakeview Drive Pumping Station Replacement

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2014 - 2014

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 7

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project calls for replacement of the Smith & Loveless package pumping station installed in 1971. The station has exceeded its life anticipated expectancy of 20-25 years and is need of a capacity upgrade due to high peak inflow rates.

NEED, JUSTIFICATION, BENEFIT: Replace the aged station with a completely new station to prevent the need for costly unbudgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterway or backup in a residence. Due to the age of the station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2014, construction in FY 2015.

COMMENTS: This station is located within the roadway of Lakeview Drive. The design portion of this project is to address the relocation of this station.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design						46,600		**46,600**
Land								
Construction							336,400	**336,400**
Miscellaneous								
Other								
TOTAL						**46,600**	**336,400**	**383,000**

FINANCING:

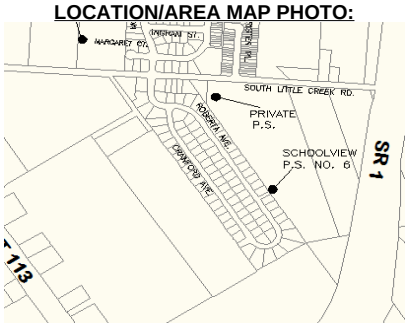
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund						46,600	336,400	**383,000**
TOTAL						**46,600**	**336,400**	**383,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Schoolview Pumping Station Force Main Redirect

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2014 - 2014

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 8

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project was identified in the Wastewater Master Plan Technical Documents and will reroute approximately 2,500 linear feet of 6-inch force main exiting the Schoolview Pumping Station.

NEED, JUSTIFICATION, BENEFIT:

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in continued stress on the Schoolview Pumping Station in addition to increased costs for the upgrades to the Schoolview Pumping Station.

THIS PROJECT IS RELATED TO THE FOLLOWING:

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2014, construction in FY 2015.

COMMENTS: Rerouting of the force main will allow for the Schoolview Pumping Station to function through the 20-year planning period outlined in the 1999 Wastewater Plan Technical Documents. Current alignment proposal will utilize road right-of-way to minimize need for private easements.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design						40,000		**40,000**
Land								
Construction							100,000	**100,000**
Miscellaneous								
Other								
TOTAL						**40,000**	**100,000**	**140,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund						40,000	100,000	**140,000**
TOTAL						**40,000**	**100,000**	**140,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Silver Lake Pumping Station Replacement/Upgrade

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2014 - 2014

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Wastewater Mgmt

DEPT. RANKING: 9

NEW PROJECT: Yes

PROJECT DESCRIPTION: This project calls for replacement or upgrade of the Smith & Loveless package pumping station installed in 1982 in order to handle development in the area. The station has exceeded its life expectancy of 20-25 years and is in need of a capacity upgrade.

NEED, JUSTIFICATION, BENEFIT: Replace/upgrade the aged station with a completely new station to prevent the need for costly unbudgeted repairs to maintain operation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Pump failure resulting in a sewage spill into waterways or backup in a residence. Because of the age of the pump station, certain parts are no longer obtainable and replacement of equipment is costly.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Design and bid in FY 2014, construction in FY 2015.

COMMENTS: None

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design						77,000		**77,000**
Land								
Construction							359,125	**359,125**
Miscellaneous								
Other								
TOTAL						**77,000**	**359,125**	**436,125**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund						77,000	359,125	**436,125**
TOTAL						**77,000**	**359,125**	**436,125**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Remote Control and Monitor Wells

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2009 - 2010

PROJECT NO: WD0802

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 3

NEW PROJECT: No

PROJECT DESCRIPTION: This project, identified in the 2006 Water Master Plan Update, would provide SCADA system and monitoring upgrades for the production wells.

NEED, JUSTIFICATION, BENEFIT: This project will provide SCADA System and monitoring upgrades to improve accuracy, totalization, compatibility, and monitoring ability with SCADA system. This project will also improve VFD control and increase the ability to comply with reporting requirements.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in the continuation of less than adequate control of wells and monitoring ability.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Tentative schedule: Implementation in Fiscal Year 2010

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous	139,700	55,000						**194,700**
Other								
TOTAL	**139,700**	**55,000**						**194,700**

FINANCING:

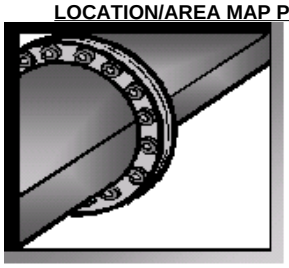
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund	139,700							**139,700**
Capital Asset Reserve		55,000						**55,000**
TOTAL	**139,700**	**55,000**						**194,700**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Water Quality Improvements

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2009 - 2014

PROJECT NO: Misc

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 4

NEW PROJECT: No

PROJECT DESCRIPTION: This project was first identified by staff and the 2006 Water Master Plan Update, and has since become further refined with the Fiscal Year 2006 Water Quality Evaluation. Projects to be included under this category primarily consist of additional water system monitoring, replacement or relining of old unlined cast iron water main within the City's water distribution system; system upgrades to improve system control; and utilization of a consultant to provide additional design and evaluation services, as needed. Recent research and data collections have produced a Water Line Rehabilitation Priority List, based on several criterion to identify water mains that are in need of replacement or relining. Pipes will be upgraded according to the severity of the pipe condition, as well as coordination with the City of Dover's Public Services Street Rehabilitation Program.

NEED, JUSTIFICATION, BENEFIT: Water quality complaints have eroded consumer confidence in the City's water supply as the water is perceived to be aesthetically unpleasant. In order to reduce complaints and potentially alleviate this problem, it is necessary to implement the improvements identified by staff, the 2006 Water Master Plan Update, and the Fiscal Year 2006 Water Quality Evaluation.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project will prolong customer dissatisfaction and further erode confidence in the City's water supply. In addition, main rehabilitation and replacement, ensuring pipes do not significantly exceed the expected life cylce, is critical to provide a reliable supply of water for our customers and for fire suppression, water leaks and breaks on older lines can have a significant impact on our ability to serve over time.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: Addressing the brown water and associated water quality concerns of the City's water system will not only require capital improvements to the system but also operational changes. Some operation changes will result in no net effect on the operating budget, while others will need to be addressed in the development of future operating budgets. Such items include tools and supplies necessary to improve system sampling and monitoring as well as tools and supplies necessary to improve system-wide flushing operations.

TIME-LINE/CURRENT STATUS: The primary Water Quality Improvement project completed to date consists of the replacement of unlined eight-inch and fourteen-inch cast iron pipe in Division Street between State Street and Bayard Avenue. In Fiscal Year 2008 and Fiscal Year 2009, the deep well contact chamber designs were completed and installation completed. Operational efforts,such as flushing, will occur on a continuous basis.

COMMENTS: As part of the water quality waterline rehabilitation priority program, water lines were identified throughout the City that require replacement/relining. Using this as a guide the following water line rehabilitation projects are scheduled for Fiscal Year 2010: North Pennsylvania Ave., Madison St., Rodney Rd., American Avenue Ext., Hazel Rd., Smith St., Maryland Ave., US Route 13, Greenhill Road, Bayard Avenue, Bayard Avenue Alley, Walker Road Design, and Loockerman Street Design. In some cases it may only be portions of the streets that require replacement; we have not differentiated that within this listing. If a street is added to the City's street program that was not anticipated we may defer one of the listed projects to address that street before it is repaved.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design	625,000	400,000	500,000	450,000	600,000	400,000	350,000	**3,325,000**
Land	240,000							**240,000**
Construction	1,987,000	2,404,600	2,697,100	2,931,100	2,633,500	3,036,900	2,806,900	**18,497,100**
Miscellaneous								
Other								
TOTAL	**2,852,000**	**2,804,600**	**3,197,100**	**3,381,100**	**3,233,500**	**3,436,900**	**3,156,900**	**22,062,100**

FINANCING:

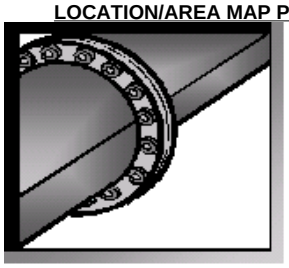
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund	1,265,000		3,197,100	3,381,100	3,233,500	3,436,900	3,156,900	**17,670,500**
Bond Financing	1,587,000	2,804,600						**4,391,600**
TOTAL	**2,852,000**	**2,804,600**	**3,197,100**	**3,381,100**	**3,233,500**	**3,436,900**	**3,156,900**	**22,062,100**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Miscellaneous Distribution System Improvements

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: WD0903

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 1

NEW PROJECT: No

PROJECT DESCRIPTION: This project will primarily address major emergency water line repairs. In addition, it also eliminates hydraulically inefficient water mains throughout the City by interconnecting dead ends with existing mains already in place, removing bottlenecks within the system, and installing improvements identified by the flushing program. These funds can also be used to partner with private developers to oversize future mains to meet the long term goals of the utility.

NEED, JUSTIFICATION, BENEFIT: Due to the age of the water system, it can be expected that water lines will break resulting in expense to repair the main. In addition, existing dead end mains and bottlenecks do not provide adequate circulation within the water system. The result is stagnant water which continually produces complaints from residents. Implementing improvements identified by the flushing program will aide in improved operational control of the system. Missing opportunities to oversize strategic mains will result in higher construction costs in the future.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in reduced ability to properly address breaks, continued complaints from customers and residents regarding water quality and missed opportunities to expand the transmission and distribution system.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: This is an ongoing annual program. We identify, plan, and construct improvements each year and address emergency repairs as they occur.

COMMENTS: Emergency repairs are typically performed by private contractors. Work on planned projects will be done using in house construction, and costs are for materials used to make water main improvements only. All costs for over sizing will be paid to private developers through negotiated cost and public utilities agreements.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	393,948	65,000	70,000	75,000	80,000	85,000	90,000	**858,948**
Miscellaneous								
Other								
TOTAL	**393,948**	**65,000**	**70,000**	**75,000**	**80,000**	**85,000**	**90,000**	**858,948**

FINANCING:

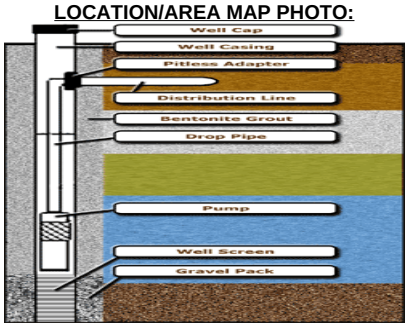
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Impact Fee Reserve	393,948	65,000	70,000	75,000	80,000	85,000	90,000	**858,948**
TOTAL	**393,948**	**65,000**	**70,000**	**75,000**	**80,000**	**85,000**	**90,000**	**858,948**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Wellhead Redevelopment Program

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2014

PROJECT NO: WD0801

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 2

NEW PROJECT: No

PROJECT DESCRIPTION: This project will provide for rehabilitation and repair of each deep wellhead in an effort to maintain operations and/or increase the yield of each well as it relates to the permitted allocation.

NEED, JUSTIFICATION, BENEFIT: The well screening and gravel pack requires cleaning over time due to a buildup of mineral deposits and foreign materials such as clay and silt. This maintenance effort is critical to ensure that production can continue to meet demand. It is also necessary to maintain the operational aspects of each well and provide repairs as needed to minimize downtime to maintain system capacity.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in the continued deterioration of the well screen, gravel pack, and well yield over time. It would also result in increased well downtime and emergency repairs and decreased capacity. These issues can lead to increased flow pattern changes and water quality concerns.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: Improved operating efficiencies at the wellhead will slightly reduce power costs, but this savings has not been quantified.

TIME-LINE/CURRENT STATUS: This is an ongoing annual program. Fiscal Year 2010: Wells #2 (motor and redevelop), #10 (motor) and #14 (pump, motor and redevelop)are scheduled to be complete.

COMMENTS: Fiscal Year 2005: Wells #8, #10 and #11 were completed. Fiscal Year 2006: Wells #2 and #6 were completed. Fiscal Year 2008: total well inspection and testing performed. Fiscal Year 2009: Motors at Wells #6A and #9 were rebuilt, and wells #13R and #15 were redeveloped.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction	280,962	55,000	60,000	65,000	70,000	75,000	80,000	**685,962**
Miscellaneous								
Other								
TOTAL	**280,962**	**55,000**	**60,000**	**65,000**	**70,000**	**75,000**	**80,000**	**685,962**

FINANCING:

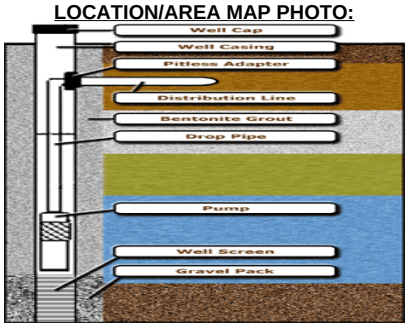
	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund	280,962	55,000	60,000	65,000	70,000	75,000	80,000	**685,962**
TOTAL	**280,962**	**55,000**	**60,000**	**65,000**	**70,000**	**75,000**	**80,000**	**685,962**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Piney Point Well

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2010 - 2011

PROJECT NO: WD0805

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 5

NEW PROJECT: No

PROJECT DESCRIPTION: This project, identified by staff and confirmed by the 2006 Water Master Plan Update, proposes the drilling of a new Piney Point Aquifer Production Well to increase production capacity up to our current permitted allocation as well as increase system pressure and stabilize the chlorine residuals of the City.

NEED, JUSTIFICATION, BENEFIT: A reduction in long-term yield from our Piney Point Well is causing a greater reliance on our more costly aquifers.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in the continued reduction in our production capabilities under our permitted allocation, as well as our ability to meet projected demand increases.

THIS PROJECT IS RELATED TO THE FOLLOWING: 1.0 MG Elevated Water Storage Tank

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Planning occured in Fiscal Year 2008. Design and site procurement occured in Fiscal Year 2009. Construction to be completed in Fiscal Year 2010.

COMMENTS: The specific location of a proposed wellhead has not been determined at this time. The location will be selected with the assistance of a consultant and through exploratory drilling. In addition, the yield from a new production well may allow us to abandon some of our poorly performing wells. Costs identified in the 2004 Water Master Plan Update have been increased based upon 3.5 percent per year. Land costs are based upon the need of 1/2 acre of land for the project.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		95,000						**95,000**
Land		120,000						**120,000**
Construction			450,000					**450,000**
Miscellaneous								
Other								
TOTAL		**215,000**	**450,000**					**665,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Bond Financing		215,000	450,000					**665,000**
TOTAL		**215,000**	**450,000**					**665,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

1.0 MG Elevated Water Storage Tower

FISCAL YEAR S : 2010 - 2011

PROJECT NO: WD0804

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 6

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: The proposed project, identified by staff and confirmed by the 2006 Water Master Plan Update, will construct a new 1.0 million gallon elevated storage tank within the distribution system.

NEED, JUSTIFICATION, BENEFIT: This project was determined necessary by the 2006 Water Mater Plan update in order to meet future storage volume requirements based upon demands and to aid in reducing low pressure areas and enhance fire supression capability.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: The City's western and southern territories will experience pressure fluctuations due to changes in demand. In addition, fire suppression measures could be affected.

THIS PROJECT IS RELATED TO THE FOLLOWING: Piney Point Well.

EXPLANATION OF IMPACT ON OPERATING BUDGET: The impact on the operating budget has not been analyzed at this time.

TIME-LINE/CURRENT STATUS: Planning occured in Fiscal Year 2008. Design and site procurement occured in Fiscal Year 2009. Construction is planned for Fiscal Year 2010.

COMMENTS: Original project costs were provided in the 2006 Water Master Plan based upon 2005 dollars. Out year costs have been increased by 3.5 percent per year. Contractual services will be required to assist with planning, design and site selection and land aquisition and to perform construction. Land costs are based upon the estimated need of one (1) acre of land for the project.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design		150,000						**150,000**
Land		600,000						**600,000**
Construction			2,590,000					**2,590,000**
Miscellaneous								
Other								
TOTAL		**750,000**	**2,590,000**					**3,340,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund		55,000						**55,000**
Bond Financing		695,000	2,590,000					**3,285,000**
TOTAL		**750,000**	**2,590,000**					**3,340,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Emergency Generators (Wells)

LOCATION/AREA MAP PHOTO:



FISCAL YEAR : 2012

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 4

NEW PROJECT: No

PROJECT DESCRIPTION: This project, identified in the 2006 Water Master Plan Update, would provide emergency generators for production wells.

NEED, JUSTIFICATION, BENEFIT: This project will provide emergency power to wells for continued water production and reliability in the event of power disruptions or other emergencies.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in reduced or suspended water service in the event of power disruptions or other emergencies.

THIS PROJECT IS RELATED TO THE FOLLOWING: Remote Control and Monitor Wells, Water Quality

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Portable or fixed generators are currently not available to most of the deep wells. The Water Treatment Plant is equipped with a fixed generator.

COMMENTS: Provision of standby generators at each well facility was recommended in the 2006 Water Master Plan Update with original project estimates based upon 2005 dollars. Out year costs have been increased at 3.5 percent per year. Additional funding resources such as Homeland Security funding, may become available for this program. (The generator located at Well #10 was purchased with Homeland Security funding.)

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design								
Land								
Construction								
Miscellaneous	140,000			150,000				**290,000**
Other								
TOTAL	**140,000**			**150,000**				**290,000**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Homeland Security Grant	140,000			150,000				**290,000**
TOTAL	**140,000**			**150,000**				**290,000**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Water Treatment Plant Process Improvements

LOCATION/AREA MAP PHOTO:



FISCAL YEAR S : 2013 - 2014

PROJECT NO: x

CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 4

NEW PROJECT: No

PROJECT DESCRIPTION: This project, identified in the 2006 Water Master Plan Update, proposes process improvements to the existing Water Treatment Plant. Due to limitations with the Ozone Contactors, the capacity at the Water Treatment Plant is limited to 4.0 Million Gallons per Day from the 5.0 Million Gallons per Day orginally designed. A consultant will be utilized to determine the best means and improvements necessary to increase the capacity. This project is to be performed in conjunction with the future Columbia Well installation.

NEED, JUSTIFICATION, BENEFIT: Process improvements will allow for capacity enhancements as well as improved ability to meet regulatory requirements.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project can result in production capacity decreases and/or regulartory incompliance.

THIS PROJECT IS RELATED TO THE FOLLOWING: Future Columbia Well installation.

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Planning is proposed for Fiscal Year 2013. Construction to begin in Fiscal Year 2014.

COMMENTS:

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design					75,000			**75,000**
Land								
Construction						171,200		**171,200**
Miscellaneous								
Other								
TOTAL					**75,000**	**171,200**		**246,200**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund					75,000	171,200		**246,200**
TOTAL					**75,000**	**171,200**		**246,200**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Future Columbia Well Installation

FISCAL YEAR S : 2013 - 2014

PROJECT NO: x

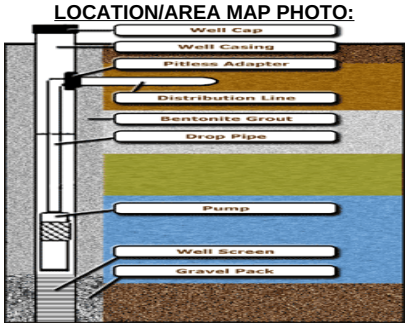
CATEGORY: Water/Wastewater

DEPARTMENT: Public Utilities - Water Mgmt

DEPT. RANKING: 5

NEW PROJECT: No

LOCATION/AREA MAP PHOTO:



PROJECT DESCRIPTION: This project, identified by staff and confirmed by the 2006 Water Master Plan Update, proposes the drilling of new shallow wells to increase production capacity at the Water Treatment Plant to design levels of 5.0 Million Gallons per Day. This project is to be completed in conjunction with the Water Treatment Plant process improvements.

NEED, JUSTIFICATION, BENEFIT: To meet increased water demand and fire supression requirements.

CONSEQUENCES OF DELAYING OR ELIMINATING THIS PROJECT: Delaying or eliminating this project would result in the continued reduction in our production capabilities.

THIS PROJECT IS RELATED TO THE FOLLOWING: N/A

EXPLANATION OF IMPACT ON OPERATING BUDGET: N/A

TIME-LINE/CURRENT STATUS: Planning is proposed for Fiscal Year 2013. Design and site procurement are planned for Fiscal Year 2014. Construction to be completed in Fiscal Year 2015.

COMMENTS: The specific location of a proposed wellhead has not been determined at this time. The location will be selected with the assistance of a consultant during the planning and design phase. In addition, the yield from a new production well may allow us to abandon some of our poorly performing wells. Costs identified in the 2006 Water Master Plan Update have been increased based upon 3.5 percent per year. Land costs are based upon the need of 1/2 acre of land for the project.

FIVE-YEAR COST BREAKDOWN SCHEDULE:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Planning and Design					25,000	98,800		**123,800**
Land						72,600		**72,600**
Construction							408,900	**408,900**
Miscellaneous								
Other								
TOTAL					**25,000**	**171,400**	**408,900**	**605,300**

FINANCING:

	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL
Water/Wastewater Fund					25,000	171,400	408,900	**605,300**
TOTAL					**25,000**	**171,400**	**408,900**	**605,300**

IMPACT ON OPERATING BUDGET:

Description	Prior to 2010	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	After 2014	TOTAL

Memorandum

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To: **Utility Committee Members**

From: **Anthony J. DePrima, AICP, ICMA-CM**
City Manager

Date: **April 1, 2009**

Subject: **Use of Energy Efficiency and Conservation Block Grant Funds**

The City of Dover was recently informed that it is eligible for Energy Efficiency and Conservation Block Grant formula funding. Based on the formula, Dover can receive $180,400 and applications are due by June 25, 2009. The staff is seeking guidance on use of these funds. The purpose of the program is to implement strategies to reduce fossil fuel emissions, total energy use, and improve energy efficiency in all sectors. The success of the program will be measured by the following: jobs created and/or retained; energy savings on a per dollar invested basis; renewable energy capacity installed; and greenhouse gas emissions reduced.

Specific activities that are eligible are listed as follows:

- Development of an Energy Efficiency and Conservation Strategy and Technical Consultant Services to Assist in the Development of such a Strategy.
- Residential and Commercial Building Energy Audits.
- Financial Incentive Programs and Mechanisms for Energy Efficiency Improvements such as Energy Savings Performance Contracting, On-bill Financing, and Revolving Loan Funds.
- Grants to Nonprofit Organizations and Governmental Agencies for the Purpose of Performing Energy Efficiency Retrofits.
- Energy Efficiency and Conservation Programs for Buildings and Facilities.
- Development and Implementation of Transportation Programs to Conserve Energy.

- Building Codes and Inspections to Promote Building Energy Efficiency.
- Energy Distribution Technologies that Significantly Increase Energy Efficiency include the following: Distributed Resources, Combined Heat and Power, and District Heating and Cooling Systems.
- Material Conservation Programs Including Source Reduction, Recycling, and Recycled Content Procurement Programs that Lead to Increases in Energy Efficiency.
- Reduction and Capture of Methane and Greenhouse Gases generated by Landfills or Similar Waste-related Sources.
- Energy Efficient Traffic Signals and Street Lighting.
- Renewable Energy Technologies on Government Buildings.

I am recommending applying for three programs as follows:

- Solar PV project located on the roof of the McKee Run power plant. This project has already been bid out and the cost would be $65,000. I cannot call it shovel ready since it's on a roof, but in the spirit of the Stimulus Bill it is ready to go.
- We have been analyzing the cost of a demonstration project that would install LED street lights. We will have a pricing and location of this at the meeting.
- Latest the remaining funds we would like to use on building and equipment conservation measures on city owned buildings. For example, replacing pumps at wells and lift stations with more energy efficient models. We will have a pricing of this at the meeting.

Since it is only $180,400 we would discourage any use that has high administrative costs such as grants to other non-profits and financing programs. In addition, there is a great deal of money coming forward through the State Energy Office for home energy audits, weatherization programs, residential and commercial renewable energy, and energy efficiency programs. Therefore this is no need to duplicate these programs.

PACE | Global Asset Management

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City of Dover

February Monthly Report

Energy and Operations Management

March 19, 2009

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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.

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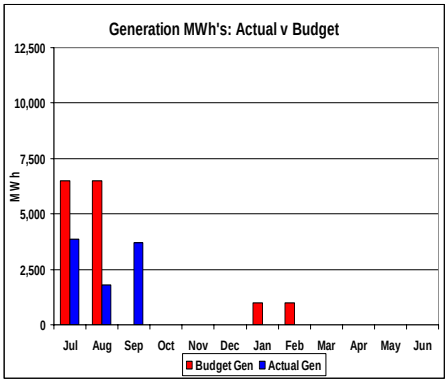
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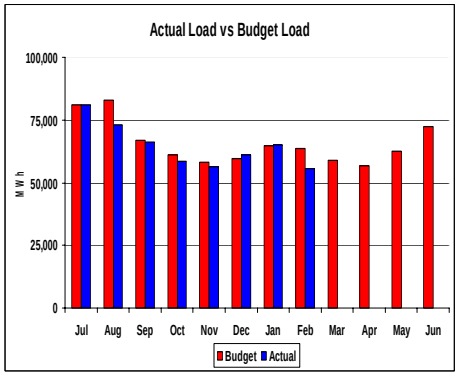
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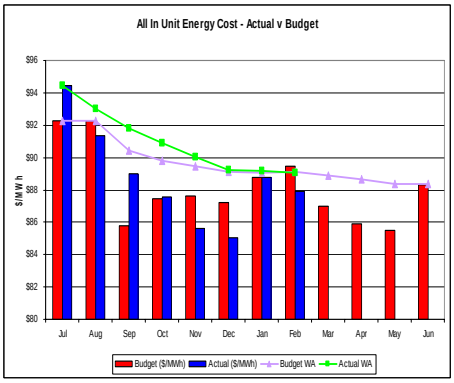
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1.0 - EXECUTIVE SUMMARY







Purchased Power Management

Wholesale load for the month of February was 55,533 MWhs versus a three year historic weather normalized load of 63,547 MWhs (a 13% reduction). Hedged transactions accounted for 56,800 MWhs or 102% of this volume (87% of forecasted load) at a cost of $4.45 million. Spot Market purchases resulted in a PJM charge of $16 thousand ($43 Thousand charge in the Day Ahead market and a $27 thousand credit in the real time market) primarily due to day-ahead load forecast projections and the load following costs. Other PJM related charges accounted for an additional $0.98 million cost, inclusive of all load related fees. February All-In Energy Unit Cost, excluding capacity obligations and credits were $1.56/MWh favorable compared to the February 2009 budget of $89.48/MWh. For the year, projected All-In Energy Unit Cost is $0.07/MWh below the budget; based on YTD actual results and budgeted values for subsequent months.

Generation and Asset Management

For the month of February, PJM did not dispatch the McKee Run or the Van Sant units.

Dover self dispatched McKee Run Unit 3 in order to perform test procedures as part of the Fuel Oil Conversion Capital Improvement Project (The Project) and to demonstrate the capacity or MW capability of the power plant (capacity testing is a PJM requirement). Unit 3 generated 3,983 MWh of generation and the testing resulted in a negative margin of $221 thousand or -$55 per MWH. The plant generated $235 thousand net revenues and consumed $438 thousand of natural gas (51 thousand Dth) and $18 thousand inventory costs of #2 low sulfur fuel oil (10 thousand gal). These revenues and costs associated with The Project are included in the CIP expenditures and are not recognized as normal operating revenues and expenses.

Emissions and Allowance Management

Dover engaged in no allowance transactions during the month of February. McKee Run operated during February and emitted one ton of SO_2. No NO_x emissions were reported. Total net revenue through February 28th from allowance sales for the 2008-09 fiscal year is $165,470, accounting for Broker's fees.

Given current dispatch expectations, the market value of the 2007-2009 Dover allowance inventories is approximately $581 thousand at the time of this report. If sold, Dover would realize approximately $747 thousand in revenue for the year. This would result in a $695 thousand unfavorable variance.

Compliance emissions allowance values have undergone a steady decline throughout 2009. Since the last monthly report, the SO_2 allowance market has continued its decline with allowance values reaching $65/ton. NOx annual allowance values have also declined with prices moving from $3,000/ton down to $2,165/ton over the past month. The seasonal market has remained steady at $600/ton with limited market activity.

The prevailing poor economic conditions and the consequent reduction in power demand have applied some downward pressure on emissions allowance prices. However, the primary drivers for reduced allowance prices appear to be the continuing uncertainty surrounding future regulation of SO_2 and NO_x emissions along with the fact that generators are largely in compliance with existing emission limits.

The regulatory uncertainty stems primarily from the status of the Clean Air Interstate Rule (CAIR), which has been remanded without vacatur. EPA is considering alterations to this rule, which had been struck down due to its violation of the Clean Air Act. Uncertainty will remain in the markets until new rules are formed and approved, and without Congressional mandate, it appears that this uncertainty will continue for at least the remainder of calendar year 2009.

Additionally, generators have largely met compliance requirements for 2008, and with uncertainty driving speculators from the market, allowance demand remains low. Emissions controls also appear to be working properly across the industry, therefore increasing the emissions bank and further reducing forward allowance demand. Pace is closely monitoring the the NO_x and SO_2 markets and will provide Dover with assessments of allowance allocations, liquidity, and value as information becomes available.

The December RGGI quarterly auction cleared 31,505,898 allowances at $3.38/ton, and demand was reported to be 3.5 times greater than supply. Since the auction, the market has been very active with prices ranging between $3.50/ton and $4.00/ton. Current prices are at $3.77/ton. Based on projected generation and emissions Dover is projected to have an excess of 70,000 allowances through 2013 with a market value of nearly $264,000. Pace will continue to monitor the RGGI market and will advise Dover regarding allowance sales if the market alters.

EMISSIONS & ALLOWANCE SUMMARY						
Allowance Vintage	Allowance Allocation	Emissions Month	Emissions YTD	Allowances Sold Month	Allowances Sold YTD	Allowance Balance
SO_2 – 2007	2723	0	98	0	2076	549[1]
SO_2 – 2008	2723	0	32	0	0	2,691
SO_2 – 2009	2723	1	1	0	0	2722
NO_x – 2007	198	0	32	0	166	0
NO_x – 2008	198	0	20	0	178	0
NO_x – 2009	198	0	0	0	0	198

Operations Management Summary

During the month of February, there were no employee or contractor related OSHA injuries, illnesses, or time loss accidents. There were zero Environmental Notices of Violations issued during the month. There were no unit dispatches of any of the McKee Run Units or the Van Sant Unit 11. Unit 3 ran four times in February for testing.

Monthly Budget Variance - The actual expenses attributable to O&M of the two sites for the month of February were $386,617. The expenses were $7,275 or -0.12% over the approved budget of $379,342. The principal reason for the negative variance is due to the operational costs associated with running Unit 3 for testing.

Boiler work on Unit 3 was the focus of the major activities for the Month. A maintenance outage was taken in order to make repairs to ductwork expansion joints and boiler casing.

[1] Corrected 2007 SO2 tons emitted to reflect actual emission for Units 3 & 11. December, 2007 report included emissions for all four units.

Risk Management Summary

Energy commodity prices fell further since the last reporting period, and have fallen almost continuously since June 2008. While world oil prices slightly increased from $40/barrel to $47/barrel, natural gas prices – the prime driver of power prices relevant to the City – fell to under $4.00, their lowest levels in six years. In turn, PJM forward power prices decreased since the last reporting period by $3.23/MWh (5.8%) for Fiscal Year 2009-2010 and $5.05/MWh (8.2%) for Fiscal Year 2010-2011. Outer years observed comparable price declines as the entire forward curve drifted lower.

The City's projected wholesale Cost-of-Service for all forward power years is shown in the table below:[2]

Wholesale Cost-of-Service Summary (Projected)

Date 03/13/2008	**Budget**	**March**				**February**	**January**
Power Year	Cost-of-Service Budget	Cost-of Service $/MWh	Hedge Ratio	Year-to Year Increase	Projected vs. 08-09 Budget	Cost-of Service $/MWh	Cost-of Service $/MWh
2008-2009	$90.18	$90.54	92%	9.5%	0.4%	$90.55	$90.43
2009-2010	N/A	$93.23	87%	3.0%	3.4%	$93.66	$93.01
2010-2011	N/A	$86.48	73%	-7.2%	-4.1%	$87.84	$87.35
2011-2012	N/A	$81.84	62%	-5.4%	-9.3%	$83.51	$83.47
2012-2013	N/A	$80.65	42%	-1.5%	-10.6%	$82.68	$83.18
2013-2014	N/A	$76.37	3%	-5.3%	-15.3%	$79.15	NA

** Reflects balance of year hedge ratio for current Power Year*
*** FY 07/08 Cost-of-Service is $82.70/ MWh*

[2] Note that the PJM-W to DPL zone basis has been updated based on actual basis values observed in the past 2 years, consistent with the proposed 2009-10 budget. The higher basis values are reflected in the February Wholesale Cost-of-Service values shown above, but not in the January and December values (which are consistent with prior reports).

2.0 - BUDGET REPORT

2.1 – VARIANCE REPORT

	Budget Feb-09	Actual Feb-09	Variance Feb-09
Load Forecast	**63,547**	**55,533**	**8,014**
Power Supply			
Power Supply	$3,973,936	$4,451,888	($477,952)
Power Supply Management	$230,214	$239,415	($9,201)
Capacity Charges - Load	$799,638	$807,347	($7,709)
PJM Charges - Load	$1,482,074	$190,919	$1,291,155
Total - Power Supply	**$6,485,862**	**$5,689,569**	**$796,293**
Generation			
Plant Operations	$390,612	$386,617	$3,995
Generation Fuel	$244,982	$7,860	$237,122
Capacity Credits	($691,335)	($691,335)	$0
PJM Credits	($236,901)	($5,729)	($231,173)
Total - Generation	**($292,642)**	**($302,586)**	**$9,944**
Emission Allowance Sales			
Total - Emission Allowance Sales	**($1,287,500)**	**$0**	**($1,287,500)**
Total Power Supply & Generation	**$6,193,220**	**$5,386,983**	**$806,237**
Total Power Supply, Generation & Emission Sales	**$4,905,720**	**$5,386,983**	**($481,263)**
Unit Costs			
Total – Power Supply	$102.06	$102.45	($0.39)
Total - Generation + Emission Sales	($24.87)	($5.45)	($19.42)
Final Cost of Service to City of Dover Ratepayers	**$77.20**	**$97.01**	**($19.81)**
Final Cost of Service to City of Dover Ratepayers – Adjusted	**$97.46**	**$97.01**	**$0.45**[3]

[3] The Final Cost of Service to City of Dover Ratepayers includes budgeted February, 2009 SO2 emissions sales of $1.3 million. When this unfavorable emission's allowances variance is excluded, the Dover results reverse from unfavorable to favorable.

	Budget YTD	Actual YTD	Variance YTD
Load Forecast	**538,080**	**516,697**	**21,383**
Power Supply			
Power Supply	$36,320,438	$38,986,815	($2,666,377)
Power Supply Management	$1,871,413	$1,998,856	($127,442)
Capacity Charges - Load	$6,939,713	$7,008,073	($68,360)
PJM Charges - Load	$9,762,839	$5,026,899	$4,735,940
Total - Power Supply	**$54,894,403**	**$53,020,643**	**$1,873,760**
Generation			
Plant Operations	$3,949,699	$3,420,887	$528,812
Generation Fuel	$2,276,201	$1,418,279	$857,922
Capacity Credits	($6,051,246)	($6,032,875)	($18,371)
PJM Credits	($2,479,689)	($1,506,242)	($973,446)
Total - Generation	**($2,305,035)**	**($2,699,951)**	**$394,916**
Emission Allowance Sales			
Total - Emission Allowance Sales	**($1,432,000)**	**($165,470)**	**($1,266,530)**
Total Power Supply & Generation	**$52,589,368**	**$50,320,691**	**$2,268,676**
Total Power Supply, Generation & Emission Sales	**$51,157,368**	**$50,155,221**	**$1,002,146**
Unit Costs			
Total – Power Supply	$102.02	$102.61	($0.60)
Total - Generation + Emission Sales	($6.95)	($5.55)	($1.40)
Final Cost of Service to City of Dover Ratepayers	**$95.07**	**$97.07**	**($2.00)**[4]

[4] The Budget YTD and Actual YTD Final Cost of Service to City of Dover Ratepayers include all emissions allowances sales. If we account the cost without the budgeted sale all emissions allowances, the YTD variances are favorable by $0.67 per MWh.

2.2 – VARIANCE ANALYSIS

Power Supply

- Power Supply realized an unfavorable $478 thousand variance compared to the budget due to the purchase of additional 9.9% hedge forward positions totaling 5,120 MWh in February. This purchase was transacted after the FY 2008 budget was submitted to Dover.

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

- As discussed during the July, 2008 Management Committee the PJM Base Residual Auction on April 3, 2008 resulted in a new $ per MW.day UCAP charge. This charge results in unfavorable variances each month.

- The PJM Charges for Load experienced a positive $1.29 million variance due to the placement of additional hedge position of 5,120 MWh; thereby displacing the floating energy costs by the same amount, 14% reduced load consumption compared to historical February load profile, and favorable load following variances for the month. Other positive variances include $21 thousand increase in transmission rights credits, $72 thousand favorable basis variance, and $49 thousand favorable PJM ancillary charges for the month. Offsetting these favorable variances was $25 thousand increase in transmission costs.

Generations

- Plant O&M resulted in a slight favorable variance of $4 thousand compared to the approved budget of $390 thousand.

- The plants were not dispatched or run for economic reasons, however, the McKee Unit 3 generated 3,983 MWh and the testing resulted in a negative margin of $221 thousand or -$55 per MWH. The plant generated $235 thousand net revenues and consumed $438 thousand of natural gas (51 thousand Dth) and $18 thousand inventory costs of #2 low sulfur fuel oil (10 thousand gal). These revenues and costs associated with The Project are included in the CIP expenditures and are not recognized as normal operating revenues and expenses.

- When the fuel costs for testing are removed from the Generation Fuel costs Dover realized a favorable variance of $237 thousand for the month due to the lack of dispatches for the month. The budget projected nearly 94 thousand gallons of fuel oil no.2 to be consumed for the month.

- When the PJM Credits are adjusted to back out the credits associated with the Fuel Oil Conversion testing these Credits resulted in an aggregate $231 thousand unfavorable variance for the month. The budget expected 1,000MWh of generation for the month. Neither McKee Run nor Van Sant units dispatched into the PJM market.

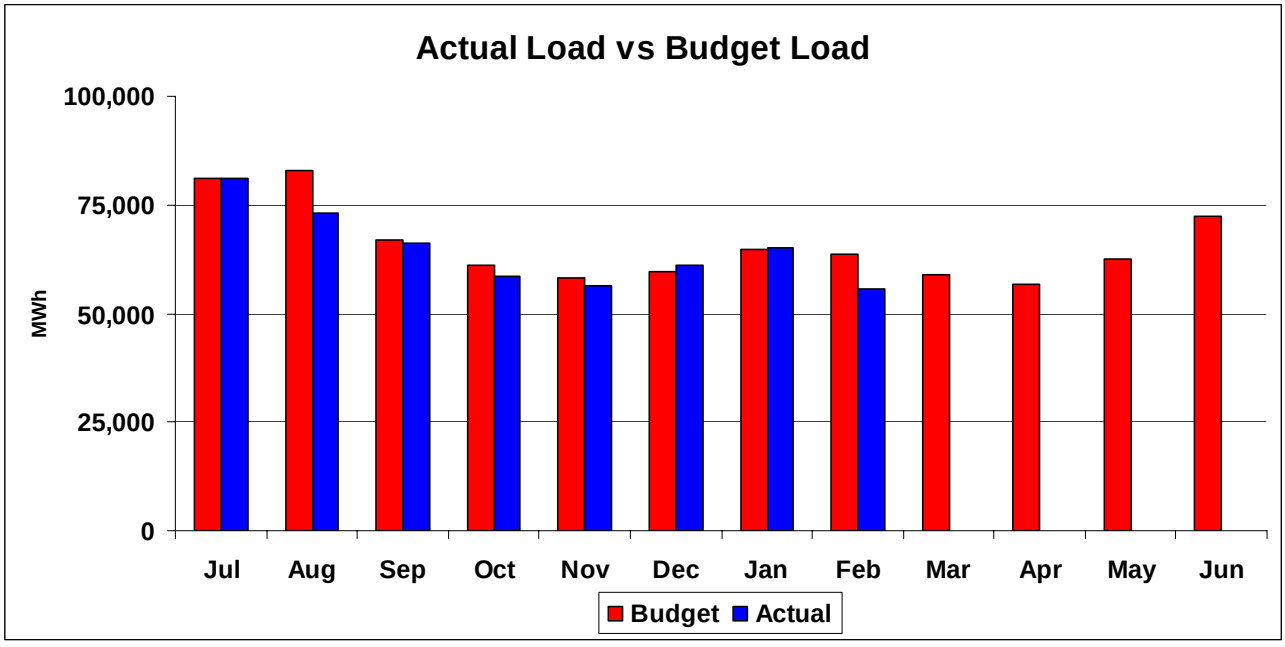
3.0 – ENERGY MANAGEMENT

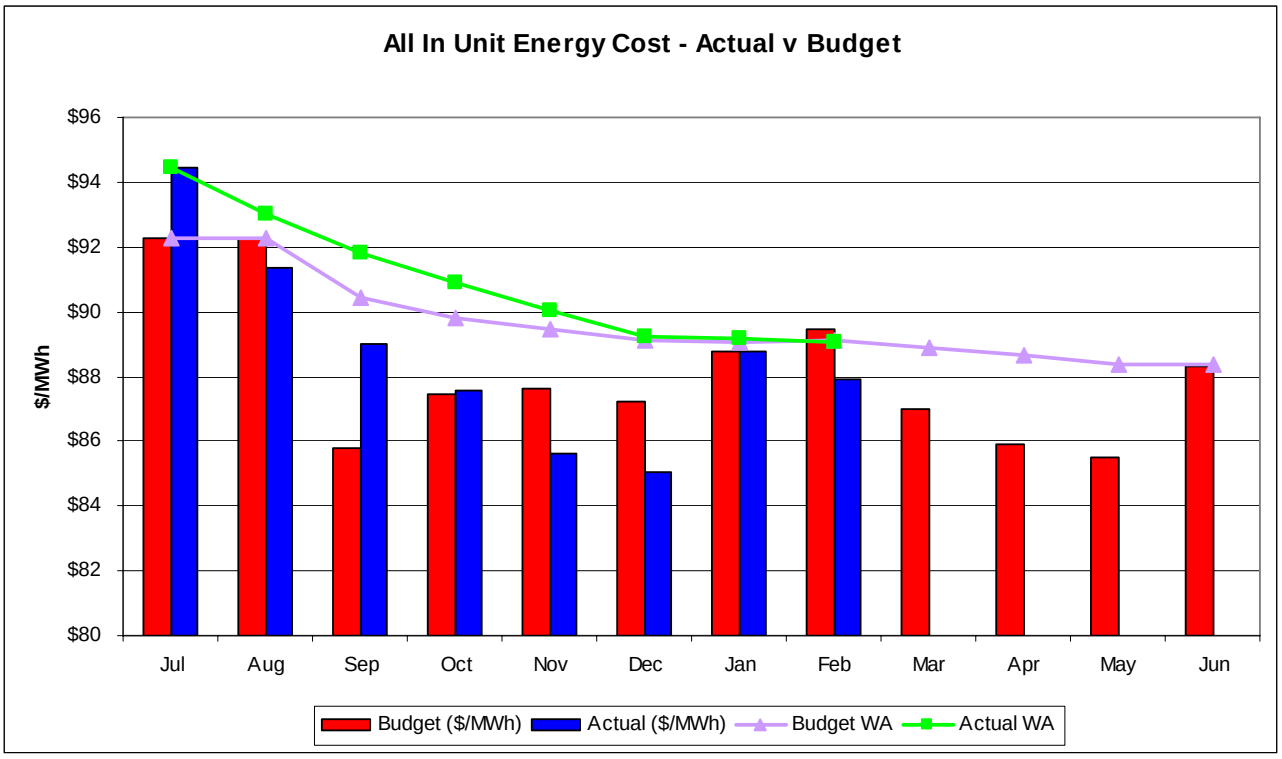
3.1 - PURCHASED POWER

Management Highlights

- Dover's February load was 55,533 MWh which was significantly below the historic weather normalized load of 63,547 MWh. Hedge volumes accounted for 102% of actual load for the month.

- February All In Unit Energy cost excluding capacity of $87.92 is $1.56 per MWh below budget for the month.




All In Unit Energy Cost - Actual v Budget
$/MWh
$96
$94
$92
$90
$88
$86
$84
$82
$80
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Budget ($/MWh)
Actual ($/MWh)
Budget WA
Actual WA

Purchased Power Variance Report

	Budget Feb-09	Actual Feb-09	Variance Feb-09
City of Dover Load			
Load Obligation (MWh)	63,547	55,533	8,014
Unit Energy Costs ($ per MWh)			
Energy Cost (inc. Load Following & Pace Fees)	$84.03	$82.27	$1.76
Pass Through	$4.45	$4.33	$0.12
Incentive Fees	$1.00	$1.31	($0.31)
Total - All In Unit Energy Cost	**$89.48**	**$87.92**	**$1.56**

Purchased Power Variance Analysis

- Actual Dover load of 55,533 MWh was 12.6% below the projected February load of 63,547 MWh.

- The All In Unit Energy Cost resulted in a favorable $1.56 per MWh variance due to a favorable $143 thousand load following variances, $72 thousand favorable basis variance, lower than anticipated open position energy costs, transmission rights credits, and PJM ancillary charges contributed to favorable variance for the month. The favorable variances were partially offset by an additional 9.9% of forward contracts placed after the Dover budget was submitted at an average cost greater than the budgeted hedge costs per MWh to defend against significant rate increases to ratepayers, and the increased FERC approved DP&L transmission rates.

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

PJM Power Balancing and Load Related Fees

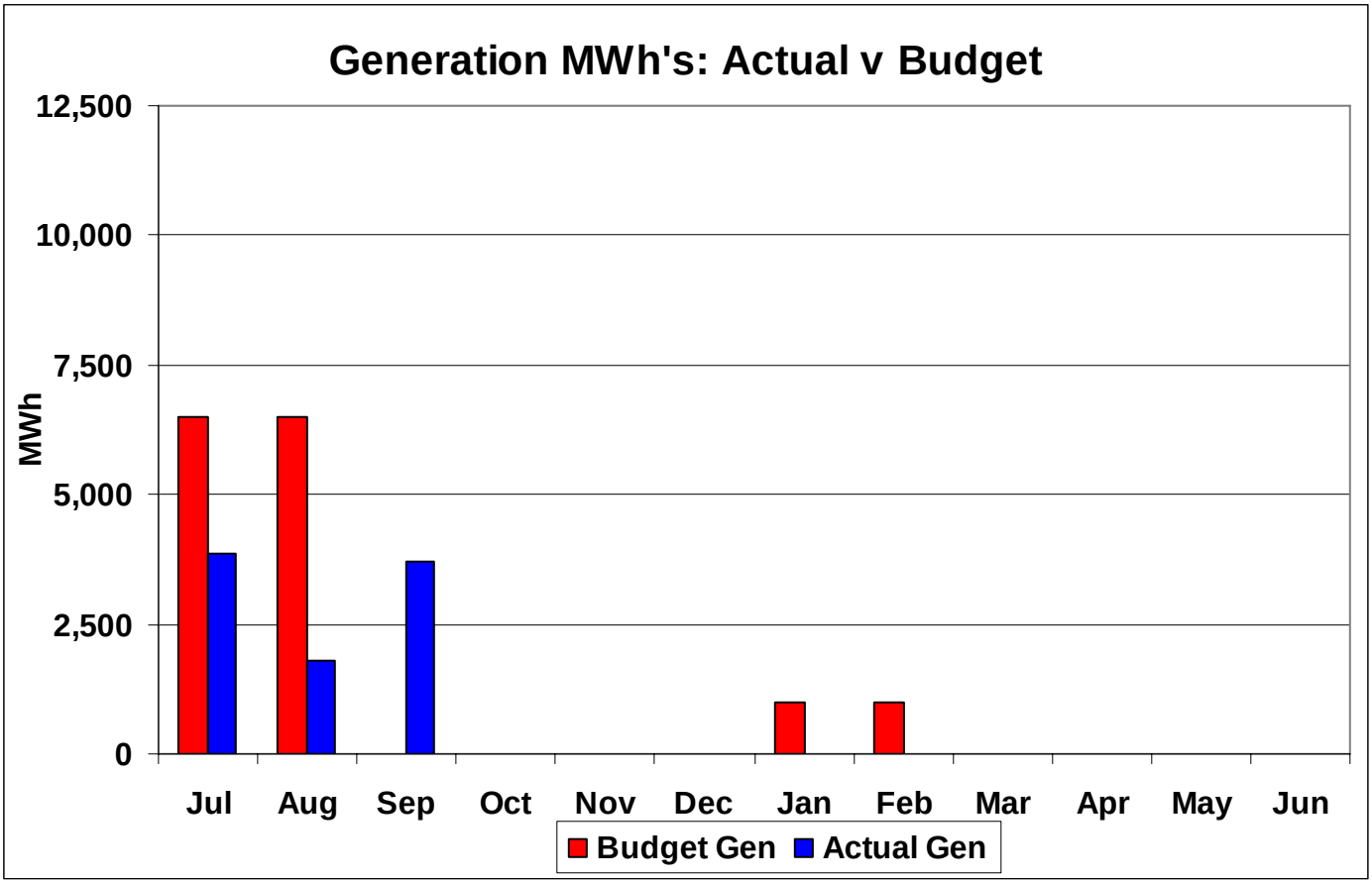
Purchased Power (Hedges): 56,800 MWh's @ $78.38/MWh:	$4,451,888
Power Balancing and Additional PJM and Energy Manager Fee[5]:	$1,237,681
Total Cost to Serve Load (55,533 MWh's)	$5,689,569

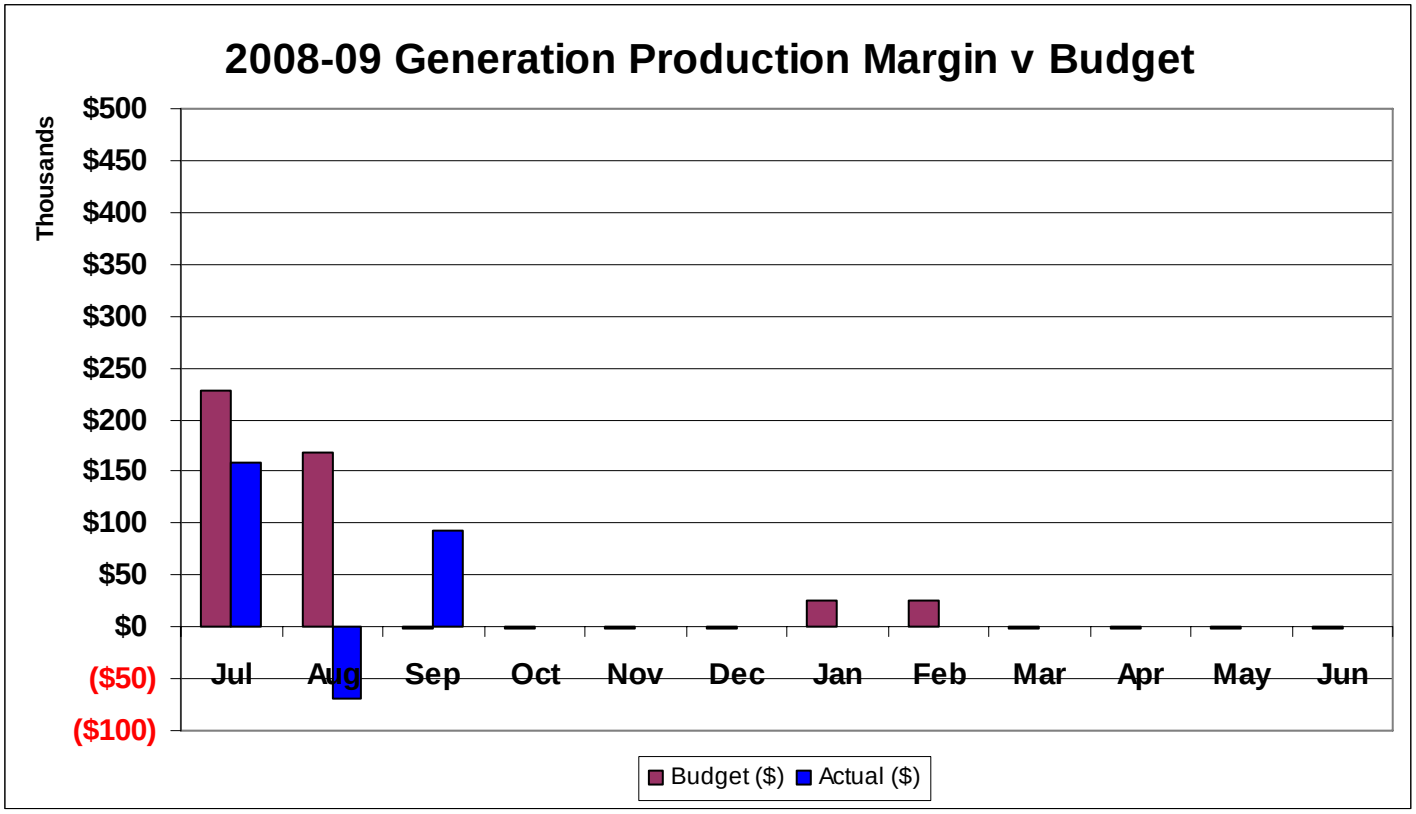
ALL in $/MWh load cost inclusive of Energy Manager Fees: $102.45/MWh

[5] Includes estimated Incentive Fees.

3.2 - GENERATION MANAGEMENT

- PJM did not dispatch Dover units into the market.





**Notes: July 2008 Report's 2008-09 Generation Production Margin v Budget graph displayed incorrect actual amount. The graph shown above has been corrected to reflect the actual value.*

Generation Management Variance Report

	Budget Feb-09	Actual Feb-09	Variance Feb-09
Self-Supplied Capacity from Gen (MW)			
McKee Run 1	13.2	13.2	0
McKee Run 2	16.7	16.7	0
McKee Run 3	97.4	97.4	0
Van Sant	38.1	38.1	0
Self Supplied Capacity from Gen (MW)	**165.4**	**165.4**	**0**
Additional Capacity from PJM Incremental Auction	**7.9**	**7.9**	**0**
Total Capacity from Gen (MW)	**173.3**	**173.3**	**0**
Gen Capacity Sales to PJM ($/MW.d)	$148.80	$148.80	0
Incremental Auction Sales to PJM ($/MW.d)	$10.00	$10.00	0
Power Sales			
Power Sales (MWh)	1,000	0	1,000
Sales Revenue ($ per MWh)	($231.50)	$0.00	($231.50)
Power Sales Revenue ($)	**($231,498)**	**$0.00**	**($231,498)**
Variable Fuel & Transport			
Fuel Oil No.2 Volume (gal)	93,863	0	93,863
Fuel Oil No.2 ($/gal)	$2.20	$0.00	$2.20
Fuel Oil No.2 Cost of Goods Sold ($)	$206,498	$0.00	$206,498
Fuel Oil No.6 Volume (gal)	0	0	0
Fuel Oil No.6 ($/gal)	$0.00	0.00	$0.00
Fuel Oil No.6 Cost of Goods Sold ($)	$0.00	0.00	$0.00
Gas Volume (Dth)	0	0	0
Unit Gas Price ($/Dth)	$0.00	0	$0.00
Variable Gas Cost ($)	$0.00	0	$0.00
Transport ($)	$0.00	0	$0.00
Variable Gas and Transport Costs ($)	$0.00	$0.00	$0.00
Variable Fuel & Transport Costs ($)	**$206,498**	**$0.00**	**$206,498**
Testing	$0.00	$0.00	$0.00
Generation Production Margin	**($25,000.00)**	**$0.00**	**($25,000.00)**
Generation Capacity Payment			
Total - Generation Capacity Payment	**($691,335)**	**($691,335)**	**$0.00**

Generation Management Variance Analysis

Fuel Expense

- PJM did not dispatch Dover units into the market.[6]

Generation Production Margin		
Transaction	Volumes	Revenue/(Cost)
PJM Invoice for Power Sold	0 MWh's	$0[7]
Fuel and Transport	0 dth gas/0 gal #6 oil 0 gal #2 oil	$0[8]
Generation Production Margin	0 MWh's	$0

The following non-production energy revenues and costs are generally fixed and not directly related to generation dispatch and power production.

PJM Invoice (Black Start)	$5,729
Fuel Oil Tank Heating & Black Start Gas Supply	$0
Eastern Shore Demand Charge	($4,489)
Eastern Shore Transport and Imbalance Charge	$0
Transco Demand Charge	($3,371)
Non-Production Energy Revenue/Costs	($2,131)

[6] Under the Fuel Oil Conversion CIP, McKee Run Unit 3 self-dispatched into PJM market four times generating 3,983 MWh. However all the revenues and fuel costs associated with CIP is not part of the Dover's Electric Revenue Fund.
[7] Fuel Oil Conversion CIP reports 3,983 MWh accruing total power sales of $235,421.63.
[8] Fuel Oil Conversion CIP testing for McKee Run Unit 3 consumed 50,957dth totaling $438,302.01 spot gas purchases. Also 10,134 gallons of fuel oil no.2 was consumed totaling $18,148.56 fuel oil costs. These costs are part of the CIP cost and therefore not reflected in the Dover's Electric Revenue Fund.

Fuel and Transportation

- PJM did not dispatch Dover units into the market and therefore no fuel usages were required for the month.[9]

Date	Volume (Dth)	Price ($/Dth)	Total Commodity Cost ($)
Hess Corp			
Sub-Total	0		$0
PESCO			
Sub-Total	0		$0
NJNG			
Sub-Total	0		$0
Total	**0**		**$0**

Do 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 fuel is no longer required. Some gas will still be required for winter heating of the building(s). Pace will still coordinate with NAES on the procurement of supply. However, this expense will now fall under the plant utility costs and be paid and budgeted for by the station.

[9] Fuel Oil Conversion CIP testing for McKee Run Unit 3 consumed 50,957dth totaling $438,302.01 spot gas purchases. Also 10,134 gallons of fuel oil no.2 was consumed totaling $18,148.56 fuel oil costs. These costs are part of the CIP cost and therefore not reflected in the Dover's Electric Revenue Fund.

Gas Transportation Purchased

Eastern Shore Natural Gas Pipeline and TransCo agreements provide for deliveries to the McKee Run and VanSant stations. These charges include a firm demand charge and adjustments as follows:

ESNG FT Demand Charge	$4,489
TransCo FT Demand Charge	$3,371
Total Purchases	$7,860

Other Gas Purchases

Commodity and transportation imbalances on Eastern Shore Pipeline for the month resulted in no cost and it is summarized as follows.

Eastern Shore Transport and Imbalance Charges			
Imbalance/dth	Estimated Cost/dth	Estimated Total Cost	
0		$0	
		$0	
Transport	Volume/dth	$/dth	Total Cost
Firm/IT		$0	$0
Net	$0		

Purchased Commodity Fuel Oil Summary

Neither McKee Run units nor Van Sant were dispatched into PJM and no fuel oil #2 was consumed for the month.[10]

McKee Run tank will maintain 3 days of load equivalent dispatches for McKee Run Units. At current fuel market prices, Pace and NAES are considering purchasing ultra low #2 fuel oil inventory when McKee Run tank testing are complete.

Tank Inventory Estimates as of February 28			
Tank	Tank Capacity (gallon)	Inventory In (gallon)	Days of Burn (Typical Dispatch[11])
McKee Run[12] **(**#2 Fuel Oil)	2,554,105	408,019	2.9
VanSant (#2 Fuel Oil)	258,000	111,412	3

[10] Pollution Remediation CIP testing consumed 10,134 gallons of fuel oil no.2.

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

[12] #6 Fuel Oil was sold (approx. 122, 000 gallons) and #2 Fuel Oil was purchased in October and December.

3.3 - EMISSIONS AND ALLOWANCE MANAGEMENT

As shown in Exhibit 1, total net revenue from allowance sales for the 2008-09 fiscal year is $165,470, accounting for Broker's fees. City of Dover holds 2,693 tons of vintage 2008 SO_2 allowances and no tons of vintage 2008 NO_x allowances. Additionally, the City has a balance of 549 tons of vintage 2007 SO_2 allowances. Also the vintage 2009 allowances are also provided in Exhibit 1. At the August 21, 2008 Management Committee meeting the Committee set a trigger price for the SO2 allowances of $260/ton whereby if the City could achieve this price it would sell half of its SO_2 allowances.

Exhibit 1: Emissions and Allowance Summary through February 28, 2009

2008-2009 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	Initial 2008 Allocation	2,723	--	--	198	--	--	--
1/1/08	2007 Carryover	549	--	--	0	--	--	--
7/21/08	Sold 150 tons NO_x	--	--	--	-150	--	$975	$144,750
10/14/08	Sold 28 tons NO_x	--	--	--	-28	--	$750	$20,720
12/31/08	2008 YTD Emissions	-32	--	--	-20	--	--	--
1/1/09	Initial 2009 Allocation	2,723	--	--	49	76	--	--
2/1/09	2009 YTD Emissions[3]	-1	--	--	0	0	--	--
Totals								
- 2007 Vintage Allowances		**549**	**--**	**--**	**0**	**--**	**--**	**--**
- 2008 Vintage Allowances		**2,691**	**--**	**--**	**0**	**--**	**--**	**--**
- 2009 Vintage Allowances		**2,722**	**--**	**--**	**49**	**76**	**--**	**$165,470**

$165,470
$0
Total Revenue **$165,470**

Notes:
(1) Revenue calculations account for a $1/ton broker fee for SO_2 and a $10/ton broker fee for NO_x.
(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) The 2009 initial allowance allocation accounts for the reinstatement of CAIR while new SO_2 and NO_x emissions rules are completed. These allocations may changes as the rulemaking process continues.

Dover engaged in no allowance transactions during the month of February. McKee Run operated during February and emitted one ton of SO_2. No NO_x emissions were reported. Total net revenue

through January 31st from allowance sales for the 2008-09 fiscal year is $165,470, accounting for Broker's fees.

Given current dispatch expectations, the market value of the 2007-2008 Dover allowance inventories is approximately $210 thousand at the time of this report. If sold, Dover would realize approximately $376 thousand in revenue for the year. This would result in a $1.05 million unfavorable variance. (The 2009 allowances are not being considered as potential revenues for this fiscal year. The City historically has sold allowances in the fiscal year following the fiscal year the allowances are credited to Dover's account).

Compliance emissions allowance values have undergone a steady decline throughout 2009. Since the last monthly report, the SO_2 allowance market has continued its decline with allowance values reaching $65/ton. NOx annual allowance values have also declined with prices moving from $3000/ton down to $2165/ton over the past month. The seasonal market has remained steady at $600/ton with limited market activity.

The prevailing poor economic conditions and the consequent reduction in power demand have applied some downward pressure on emissions allowance prices. However, the primary drivers for reduced allowance prices appear to be the continuing uncertainty surrounding future regulation of SO_2 and NO_x emissions along with the fact that generators are largely in compliance with existing emission limits.

The regulatory uncertainty stems primarily from the status of the Clean Air Interstate Rule (CAIR), which has been remanded without vacatur. EPA is considering alterations to this rule, which had been struck down due to its violation of the Clean Air Act. Uncertainty will remain in the markets until new rules are formed and approved, and without Congressional mandate, it appears that this uncertainty will continue for at least the remainder of 2009.

Additionally, generators have largely met compliance requirements for 2008, and with uncertainty driving speculators from the market, allowance demand remains low. Emissions controls also appear to be working properly across the industry, therefore increasing the emissions bank and further reducing forward allowance demand. Pace is closely monitoring the the NO_x and SO_2 markets and will provide Dover with assessments of allowance allocations, liquidity, and value as information becomes available.

The December RGGI quarterly auction cleared 31,505,898 allowances at $3.38/ton, and demand was reported to be 3.5 times greater than supply. Since the auction, the market has been very active with prices ranging between $3.50/ton and $4.00/ton. Current prices are at $3.77/ton. Based on projected generation and emissions Dover is projected to have an excess of 70,000 allowances through 2013 with a market value of nearly $264,000. Pace will continue to monitor the RGGI market and will advise Dover regarding allowance sales if the market alters.

4.0 – OPERATIONS MANAGEMENT

Management Highlights

- During the month of February, there were no restricted work days or lost time accidents. The facility has now gone 32 days without an OSHA recordable accident and 1,425 consecutive days without a lost time reportable incident. There were two near miss events during the month of February. The first near miss occurred at the facility when the pH in Unit 3 cooling tower circulating water dropped below the acceptable discharge range of 6.0 to 9.0. The second near miss occurred when an unlabeled compressed gas bottle was discovered in the compressed gas storage area.

- During the month, there were no unit dispatches of any of the McKee Run units or Unit #11 at VanSant. Unit #3 ran four times in February for testing.

- Boiler work on Unit 3 was most of the focus during the month when inspections conducted on ductwork expansion joints revealed severe corrosion on several of the joints leading to a high amount of air-in leakage that was affecting boiler performance. An outside expansion joint contractor, HTT, was called in to install high temperature fabric joints at the Air Pre-heater Gas Inlet, Dust Collector Outlet and the ID Fan Inlets (2). Repairs to other expansion joints will be addressed in the very near future.

- The operations teams have been supporting maintenance in helping with the repairs on the duct work and expansion joints. Both maintenance and operations teams worked together to aid in making repairs to Unit #3 expansion joints with the end result of a successful completion of the PJM Winter Period capacity test of Unit #3 on February 27th.

- The maintenance and operations teams are continuing to work together on building two offices on the first floor. These offices will support better communications between the Maintenance Planner and the Maintenance Supervisor as they work together to support future projects.

- The operation teams are studying in preparing to take the PJM Generation System Operator's exam. Several operators have scheduled dates to take the exam in the next few weeks.

- The position of I,C/E Technician has been filled by Mr. Robert Gallucio. He started work on February 9, 2009. The currently open position of Operator has been put on hold and will not be filled during this fiscal year.

- Discussions continue with Pace Global and Applied Power Projects on the addition of a HRSG at VanSant which could supply additional power output on the unit.

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

North American Energy Services
Dover, DE

February 2009

Monthly Report



New Expansion Joint above the Ash Hoppers

Table of Contents

1.0 Environmental, Health and Safety

2.0 Financial

3.0 Operations

4.0 Maintenance

5.0 CIP

6.0 General Plant Information

7.0 Summary of NAES Performance

1.0 Environmental, Health and Safety:

During the month of February, there were no restricted work days or lost time accidents. The facility has now gone 32 days without an OSHA recordable accident and 1,425 consecutive days without a lost time reportable incident.

There were two near miss events during the month of February. The first near miss occurred at the facility when the pH in Unit 3 cooling tower circulating water dropped below the acceptable discharge range of 6.0 to 9.0. The near miss was the result of problems with the pH control system and not monitoring the pH of the circulating water while operating the sulfuric acid pump in the manual mode. At no point in time was water discharged to the outfall.

The second near miss occurred when an unlabeled compressed gas bottle was discovered in the compressed gas storage area. The cylinder was labeled unusable and moved to a safe location. The compressed gas supplier was notified who later determined the contents of the cylinder.

Environmental, Health and Safety Statistics		
	Month (February 2009)	Fiscal Year to Date (7/1/08-6/30/09)
NOVs	0	0
Opacity Deviations	0	8
Environmental Deviations	0	1
OSHA Recordable	0	1
OSHA LTA's	0	0
First Aid cases	0	0
Restricted Workday Accident	0	1
Near Miss	2	7
Man Hours Worked	4,831.5	39,823.75
Date last OSHA Recordable		1/27/09
Date last Lost Time Accident		4/05/05
Days since last OSHA recordable		32
Days since last Lost Time Accident		1,425

Emissions (NOx & SO2) All data thru 2/28/09

NOx Summary - Year (May-Sept.)Tons					
Year	*Unit #1*	*Unit #2*	*Unit #3*	*Unit #11*	*TOTAL*
2005	20.16	20.64	103.3	2.19	146.29
2006	1.82	1.78	19.25	1.72	24.57
2007	3.3	2.7	25.9	0.7	32.6
2008	1.01	0.96	17.0	1.28	20.25
2009	0.0	0.0	0.0	0.0	0.0

NOx Allowances Summary					
NOx Allowance Vintage	**NOx Allowances Sold YTD**	**NOx Allowances Available (Per Facility, Prior to Sale)**		**Total NOx Tons Emitted (NOx Season)**	**NOx Allowance Balance**
		McKee Run	***VanSant***		
2007	165	191	7	33	0
2008	178	191	7	20	0
2009	0	191	7	0	198

Note: NOx Season is May 1 to September 30.

SO_2 Summary - Year (Jan.-Dec.)Tons					
Year	*Unit #1*	*Unit #2*	*Unit #3*	*Unit #11*	*TOTAL*
2005	49.91	52.08	530.24	2.30	634.69
2006	3.69	1.51	50.7	0.40	56.30
2007	6.28	5.31	97.69	0.28	109.56
2008	0.011	0.009	31.0	0.6	31.6
2009	0.0	0.0	0.7	0.0	0.7

Note: *Denoted data is as of 12/31/2008

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***		
2006	2725	2586	139	51	0
2007	2076	2585	138	98	549
2008	0	2585	138	32	2691
2009	0	2585	138	0.7	2722.3

Note: Denoted data is as of 2/28/2009

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	***VanSant***		
2009	0	56,825	2,045	2,980	55,890
2010	0	47,844	1,636	0	49,480
2011	0	35,883	1,227	0	37,110
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 – February 2009			
	Actual	Budget	Variance
Personnel	252,446	239,940	(12,506)
Administrative	40,547	36,252	(4,295)
EH & S	3,062	2,000	(1,062)
Maintenance Expense	1,477	38,850	37,373
Operations Expense	89,085	62,300	(26,785)
Total	**$386,617**	**$379,342**	**($7,275)**

Financial – Fiscal Year to Date

Number of Months – 8			
	Actual	Budget	Variance
Personnel	2,006,718	2,147,023	140,306
Administrative	589,037	745,916	156,879
EH & S	23,179	24,500	1,321
Maintenance Expense	201,251	329,800	128,549
Operations Expense	575,661	662,300	86,639
Total	**$3,395,846**	**$3,909,539**	**$513,694**

2.1 Variance analysis:

Our original budget for February was $379,342. The actual expenses for February are $386,617 for a variance of -$7,275 or -0.12%. The variance was due to the following:

PERSONNEL EXPENSES - Additional labor, overtime, and burdens to support the repairs and testing of Unit #3 Boiler contributed to an unfavorable variance of $12,506.

ADMINISTRATIVE EXPENSES - An unfavorable variance of $4,295 was due to the home office expenses and computer software support higher than anticipated.

ENVIRONMENTAL, HEALTH, AND SAFETY EXPENSES - An unfavorable variance of $1,062 was due to the increased costs of safety supplies/uniforms.

MAINTENANCE EXPENSES- A favorable variance of $37,373 was due to shifting maintenance activities to the spring in accounts for the turbine generator and boiler systems.

OPERATING EXPENSES – An unfavorable variance of $26,785 was due to higher electric usage than anticipated to support Unit #3 testing and the addition of natural gas costs for plant heating that wasn't included in the original O&M budget.

Budget for year is currently forecasted at $5,787,080 expensed versus $5,921,643 budgeted (98.23%).

3.0 Operations

Unit Operations / Outages / Trips

- During the month, there were no unit dispatches of any of the McKee Run units or Unit #11 at VanSant. Unit #3 ran four times in February for testing.

Month – February 2009							
		McKee Unit 1	McKee Unit 2	McKee Unit 3	MRS Facility	VanSant Unit 11	Total All Units
Capacity	MW	17	17	102	136	39	175
On Line Hours	Hrs	0	0	67.800	67.800	0	67.800
Starts	#	0	0	4	4	0	4
Gross Generation	MWh	0	0	4,334.395	4,334.395	0	4,334.395
Net Generation	MWh	0	0	4,001.942	4,001.942	0	4,001.942
Total Auxiliaries	MWh	34.365	34.365	332.453	401.183	6.615	407.798
Auxiliaries purchased	MWh	34.365	34.365	259.693	328.423	6.615	335.038
Fuel Gas Used	MMBTU	0	0	45,332.887	45,332.887	0	45,332.887
Fuel Oil Used	MMBTU	0	0	1,502.468	1,502.468	0	1,502.468
Fuel Oil Used	Gallons	0	0	10,772	10,772	0	10,772
Total Fuel	MMBTU	0	0	46,835.355	46,835.355	0	46,835.355
Net Heat Rate	BTU/KWh	0	0	11,701	11,701	0	11,701
Unit Trips	#	0	0	0	0	0	0
Capacity Factor	%	0.00	0.00	35.03	4.38	0.00	3.38
Availability Factor	%	100	100	60.65	86.88	100	90.16
Commercial Unavailability (CU)	%	0	0	0	0	0	0
Planned Outage Hours	Hours	0	0	0	0	0	0
Maintenance Outage Hours	Hours	0	0	264.417	264.417	0	264.417
Forced Outage Hours	Hours	0	0	0	0	0	0
Reserve Shutdown Hours	Hours	672.000	672.000	339.783	1,683.783	672.000	2,355.783
HW Boiler Gas Usage	MMBTU				889.413		889.413
Pilot Gas Usage	MMBTU	0	0		0		0

 # Note: Does not include HWB or Pilot Gas. Fuel usage numbers are taken from fuel flow instruments

2008-2009 Fiscal Year-to-Date (8 Months)							
		McKee Unit 1	McKee Unit 2	McKee Unit 3	MRS Facility	VanSant Unit 11	Total All Units
Capacity	MW	17	17	102	136	39	175
On Line Hours	Hrs	11.066	11.667	282.366	305.099	36.084	341.183
Starts	#	1	1	22	24	6	30
Gross Generation	MWh	123.315	132.412	16,537	16,793	1,240	18,033
Net Generation	MWh	118.511	126.506	15,143	15,388	1,240	16,628
Total Auxiliaries	MWh	237.618	238.721	2,970	3,446	33.897	3,480
Auxiliaries purchased	MWh	232.811	232.815	1,500.850	1,966.476	33.071	1,999
Fuel Gas Used	MMBTU	756	972	118,216	119,946	9,754	133,743
Fuel Oil Used	MMBTU	776	616	62,911	64,304	6,273	70,577
Fuel Oil Used	Gallons	0/5,568	0/4,418	0/136,875	297,805 /136,875	45,328	434,680
Total Fuel	MMBTU	1,533	1,588	181,127	184,248	16,028	200,276
Net Heat Rate	BTU/KWh	12,939	12,560	11,961	11,973	12,931	11,703
Unit Trips	#	0	0	0	0	0	0
Capacity Factor	%	0.12	0.13	2.55	1.94	0.54	1.63
Availability Factor	%	69.96	69.96	58.32	66.08	99.04	74.32
Commercial Unavailability (CU)	%	0	0	0	0	0	0
Planned Outage Hours	Hours	1,752	1,752	2,166.462	5,670.462	0	5,670.462
Maintenance Outage Hours	Hours	0	0	264.417	264.417	56	320.417
Forced Outage Hours	Hours	0	0	0	0	0	0
Reserve Shutdown Hours	Hours	4,068.934	4,068.333	3,118.755	11,256.022	5,740	16,995.938
HW Boiler Gas Usage	MMBTU				8,322		8,322
Pilot Gas Usage	MMBTU	0	0		0		0

VanSant Lifetime through 2/28/09			
	Actual Starts	Factored Starts	Fired Hours
VanSant	1189	2000.15	3,912.2
Since HGP - Dec 2004	140	332.45	528.578

Fuel Oil Inventory							
	Monthly Inventory (Start)	Monthly Inventory (End)	Fuel Purchases (Month)	Monthly Inventory (Change)	FY 08-09 Inventory (Start)	Fuel Purchases (YTD)	FY 08-09 Inventory (Change)
McKee Run (#6 Fuel Oil to #2 Fuel Oil)	416,831	408,019	0	8,812	426,048	536,660	(18,029)
VanSant (#2 Fuel Oil)	110,948	111,412	0	464	99,950	56,801	10,998

Note: As measured by tank level instruments. Tank levels may change due to oil temperature.
Note: * - #6 Fuel Oil was sold (approx. 122,000 gallons) and #2 Fuel Oil was purchased in October and December.

Capacity Testing – FY 2008-2009					
Summer 2008 (June 1- Aug 31)			**Winter 2008-2009 (Dec 1- Mar 1)**		
Unit	Rated Net Capability (MW)	Reported Net Capability (MW)	Unit	Rated Net Capability (MW)	Reported Net Capability (MW)
1	17	17.09	1	17	17.3
2	17	17.55	2	17	17.9
3	102	102.72	3	102	102.3
VanSant	39	40.09	11	40	40*
Total	175	177.45	Total	176	177.50

Note: * depicts a unit that has not completed capacity test for the PJM Demonstration Period in FY 2008-2009 but has been accepted into the PJM Winter Capacity Test Exemption Program.

Team Report:

The operations teams have been supporting maintenance in helping with the repairs on the duct work and expansion joints. Both maintenance and operations teams worked together to aid in making repairs to Unit #3 expansion joints with the end result of a successful completion of the PJM Winter Period capacity test of Unit #3 on February 27th.

The maintenance and operations teams are continuing to work together on building two offices on the first floor. These offices will support better communications between the Maintenance Planner and the Maintenance Supervisor as they work together to support future projects.

The GPI online training which supports our safety and OSHA training are being used by the teams to complete their training as they begin the training cycle for the year 2009. Along with the GPI OSHA training the operators review the plant's safety procedures. GPI also has a number of courses that are used to support operator advancement and refresher training.

The Senior Operators have been tasked with taking the PJM Systems Operator exam. Since January, two Senior Operators have passed the exam already and two more operators are scheduled.

4.0 Maintenance

During the month of February, plant maintenance staff continued addressing the backlog of work orders. Ninety-one work orders were issued during the month, with sixty-five work orders being completed during the month.

The table below summarizes the monthly work order activities.

Work Order Report

February - 09

Priority #	Outstanding From Previous Months	Issued This Month	Completed This Month	Outstanding at the end of the month
P1	0	0	0	0
P2	5	13	13	5
P3	4	33	22	15
P4	43	18	25	36
P5	3	4	0	7
P6	0	0	0	0
P7	9	0	0	9
P8	0	0	0	0
P9	7	1	2	6
P6 - 1	0	0	0	0
P6 - 2	0	0	0	0
P6 - 3	0	1	0	1
P6 – 4	2	0	0	2
P6 – 5	0	0	0	0
P6 – 6	0	0	0	0
P6 – 7	0	0	0	0
P6 - 8	0	0	0	0
PM	27	21	8	40
Totals	100	91	70	121

Note: PM's are included in the priority totals

Notable activities during the month include:

1) NAES maintenance team removed lagging and insulation for preparation of expansion joint replacement.

2) Coordinated work with HTT and Apex replacing the Unit #3 Dust Collector Outlet expansion joint, Air Pre-Heater Outlet expansion joint (Flue Gas side) and both ID fan inlet expansion joints.

3) Completed an inspection of the Unit 3 dead air space duct work. Several deficiencies were found and were corrected immediately.

4) Assisted NAES operations with the capacity testing of Unit 3.

5) NAES operations completed a vacuum test on the Unit 3 Reheat section during which two tubes were found to have minor leaks. The tubes were repaired and the Reheat section was retested with no other repairs needed.

6) Completed the removal and installation of the new gas spuds for Unit 3 "A" deck burners.

7) One of the Unit Three battery chargers failed and was replaced. Batteries for Units 1/2 and Unit 3 have been ordered along with another charger due the equipment coming to the of their expected service life.

8) DC power was provided to the Unit 1 and 2 annunciators from the inverter giving them backup power.

5.0 Capital Improvement Projects (CIP)

Project Number	Description	Update
EG0801	**MR Fire Protection System Upgrades**	**Progress: Project deferred to 2009 to investigate an alternative technical approach.** **Schedule: Installation now projected to be June 2009**
EG0804	**MR Pollution Remediation Equipment**	**Progress: Change out of fuel oil equipment has been completed. Plant in final stages of testing and tuning Unit 3. Units 1, 2 and 3 have successfully made the conversion and successfully completed a Winter Period Capacity Test. Schedule: Additional testing & tuning needed to optimize Unit 3 operation. Emissions testing for DNREC slated for June 2009.**
EG0901	**MR Unit 3 Continuous Emissions Monitor (CEM)**	**Progress: Complete** **Replacement was completed in October 2008.**
EG0902	**VS Unit 11**	**Progress: Complete**

	Continuous Emissions Monitor (CEM)	**Replacement was completed in October 2008.**
EG0903	**MR Unit 3 Continuous Opacity Monitor (COM)**	**Progress: Complete** **Replacement was completed in November 2008.**
EG0904	**MR & VS Arc Flash Analysis**	**Progress: Phase one will determine scope and costs to implement which will provide input to cost benefit analysis/ justification to proceed with the second phase. Task statement defining the scope of work currently being developed** **Schedule: The initial phase of the project to be completed no later than June of 2009 and the second phase to complete in May 2010.**

5.1 CIP Budget

Project Number	Description	Original Budget ($ X 1000)	Latest Estimate ($ X 1000)
EG0801	**MR Fire Protection System Upgrades**	**50**	**50**
EG0804	**MR Pollution Remediation Equipment**	**3800**	**3100****
EG0901	**MR Unit 3 Continuous Emissions Monitor (CEM)**	**30**	**50**
EG0902	**VS Unit 11 Continuous Emissions Monitor (CEM)**	**30**	**50**
EG0903	**MR Unit 3 Continuous Opacity Monitor (COM)**	**30**	**30**
EG0904	**MR & VS Arc Flash Analysis**	**125**	**75***

* $50k removed and put into O&M budget
**Includes latest projection for fuel usage for testing
The current total for Project EG0804 expensed to date is $1,931,000.

6.0 General Plant Information

Training

The teams have been using our Plant Readiness Program (PRP) for training. They use the GPI training for this training as well to review plant systems and to keep training fresh. The GPI is also used as training for operations in their job progression through the different levels of operation through the plant.

Plant staff continues to train with the GPI online training for completing the OSHA and environmental training requirements for the year. Plant staff have also continued to review the Plant SMPs (Safety Manual Procedures) for 2009.

The operation teams are studying in preparing to take the PJM Generation System Operator's exam. Several operators have scheduled dates to take the exam in the next few weeks. Senior Operator, Ted Enss, passed the PJM certification exam on February 19th. He is the second operator to pass the exam and attain certification.

Personnel

The position of I,C/E Technician has been filled by Mr. Robert Gallucio. He started work on February 9, 2009. The currently open position of Operator has been put on hold and will not be filled during this fiscal year.

Other Events

Discussions continue with Pace Global and Applied Power Projects on the addition of a HRSG at VanSant which could supply additional power output on the unit. A conference call occurred during February with the plant Manager at a Chevron site, which had incorporated the same Chang Cycle technology several ago, to learn more about the pros and cons of such a project. Additional talks have occurred since that call to address some of the issues and to discuss the measure of risk that all parties involved are willing wish to expose themselves to in a possible venture.

Boiler work on Unit 3 was most of the focus during the month when inspections conducted on ductwork expansion joints revealed severe corrosion on several of the joints leading to a high amount of air-in leakage that was affecting boiler performance. An outside expansion joint contractor, HTT, was called in to install high temperature fabric joints at the Air Pre-heater Gas Inlet, Dust Collector Outlet and the ID Fan Inlets (2). Repairs to other expansion joints will be addressed in the very near future. In addition, while investigating air-in leakage, several furnace seals in the dead air space were found compromised. Temporary repairs were made with the intent of more permanent repairs being made in the upcoming annual outage in March.

Calendar of Events	*Date*
McKee Run Units 1, 2 and 3 Outage – Oil Conversion Project	October 1, 2008 – December 31, 2008
McKee Run Unit 3 Maintenance Outage for air flow and controls tests	January 26-February 2, 2009
PJM Winter Capacity Demonstration Period	December 1, 2008 – February 28, 2009
EIA Reporting Requirements	February 1, 2009
Title V Annual Certifications Due	February 1, 2009
Sara III/Tier II Reporting Due	March 1, 2009
Annual SO2 Certification Due	March 1, 2009
Unit 3 Annual Outage	March 9 -23, 2009
Annual Emission Statement Due	April 1, 2009
Appendix E Testing for Units 1 and 2	June, 2009
Unit 3 RATA Testing and Particulate Testing	June, 2009
Unit 11 Appendix E Testing	June, 2009
Fiscal Year Ends	June 30, 2009

7.0 Summary of NAES Performance to Date

Plant Performance FY 2008-2009						
Measure	**Month**		**Year to Date**		**YTD Incentive**	**FY Maximum Incentive**
Commercial Unavailability (CU)	0%		0%		$85,863	$85,863
Safety	0		1		$8,050	$16,099
Environmental	0		0		$16,099	$16,099
Capacity Tests Completed	Summer	Winter	Summer	Winter		
Unit 1	No	No	Yes	Yes	$3,220	$3,220
Unit 2	No	No	Yes	Yes	$3,220	$3,220
Unit 3	No	Yes	Yes	Yes	$19,319	$19,319
Unit 11	No	No	Yes	Yes*	$6,440	$6,440
Total YTD Incentive %	94.64%		Total YTD Incentive		$142,211	$150,261

Note: * depicts a unit that has not completed capacity test for the PJM Demonstration Period in FY 2008-2009 but has been accepted into the PJM Winter Capacity Test Exemption Program signifying completion of test.

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	$0.00	($43,255.25)	($43,255.25)
Realtime Energy	$0.00[13]	$27,339.58	$263,461.21
Transmission Losses Credits	$0.00	$65,589.58	$65,589.58
Network Integration Transmission Service Charges	$0.00	($224,865.76)	($224,865.76)
Inadvertent Interchange Charges	$0.00	$258.09	$258.09
Regulation Charges	$0.00	($21,885.59)	($21,885.59)
Synchronized Reserve Charges	$0.00	($2,022.46)	($2,022.46)
Balancing Operating Reserves Charges	$0.00[14]	($1,792.02)	($2,492.02)
Day Ahead Operating Reserves Charges	$0.00	($6,476.17)	($6,476.17)
Day-ahead Scheduling Reserve	$0.00	($182.89)	($182.89)
Synchronous Condensing Charges	$0.00	($789.34)	($789.34)
Reactive Services Charges	$0.00	($94.04)	($94.04)
Meter Correction Charges	$0.00	$1.73	$1.73
Day-ahead Economic Load Response Program Charges	$0.00	$0.00	$0.00
Real-time Economic Load Response Program Charges	$0.00	$0.00	$0.00
Balancing Operating Reserves Credits	$0.00	$0.00	$0.00
Day Ahead Operating Reserves Credits	$0.00	$0.00	$0.00
Locational Reliability Charges	$0.00	($838,600.00)	($838,600.00)
Capacity Transfer Rights Credits	$0.00	$29,470.56	$29,470.56
Capacity Resource Deficiency Credits	$0.00	$1,782.24	$1,782.24
Demand Response and ILR Compliance Penalty Credits	$0.00	$0.00	$0.00
RPM Auction Credits	$691,334.56	$0.00	$691,334.56
Auction Revenue Rights Credits	$0.00	$68,078.92	$68,078.92
Synchronized Reserve Credits	$0.00	$0.00	$0.00
PJM Scheduling System Control and Dispatch Service Charges	$0.00	($12,014.27)	($12,014.27)
Transmission Owner Scheduling System Control and Dispatch Service Charges	$0.00	($4,222.34)	($4,222.34)
Reactive Supply and Voltage Control from Generation Sources Service Charges	$0.00	($23,640.92)	($23,640.92)
Black Start Service Charges	$0.00	($1,233.72)	($1,233.72)
North American Electric Reliability Corporation (NERC) Charge	$0.00	($386.45)	($386.45)
Reliability First Corporation (RFC) Charges	$0.00	($494.43)	($494.43)
Expansion Cost Recovery Charges	$0.00	($431.48)	($431.48)
Transmission Enhancement Charges - 2008	$0.00	($8,105.60)	($8,105.60)
Black Start Service Credits	$5,728.89	$0.00	$5,728.89
Non-Firm Point-to-Point Transmission Service Credits	$0.00	$2,372.50	$2,372.50
Generation Deactivation	$0.00	$0.00	$0.00

[13] Pollution Remediation CIP to assume Realtime Energy invoice amount of $346,121.63.
[14] Pollution Remediation CIP to assume Balancing Operating Reserves Charges invoice amount of ($700).

Market Monitoring Unit (MMU) Funding	$0.00	($327.14)	($327.14)
Organization of PJM States, Inc. (OPSI) Funding	$0.00	($35.77)	($35.77)
FERC Annual Recovery	$0.00	($3,171.00)	($3,171.00)
PPA	$0.00	$866.94	$866.94
	$932,485.08	**($998,266.50)**	**($65,781.42)**

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	**81,189**	**81,060**	**$92.30**	**$94.46**	**$94.46**	**$94.85**	**$97.04**	**$97.04**
Aug	**82,798**	**73,039**	**$92.29**	**$91.36**	**$92.99**	**$101.51**	**$101.39**	**$99.10**
Sep	**67,000**	**66,214**	**$85.81**	**$89.01**	**$91.80**	**$93.47**	**$95.27**	**$97.89**
Oct	**61,170**	**58,391**	**$87.47**	**$87.60**	**$90.92**	**$96.39**	**$97.90**	**$97.82**
Nov	**58,037**	**56,361**	**$87.62**	**$85.62**	**$90.02**	**$96.60**	**$93.43**	**$97.08**
Dec	**59,534**	**61,078**	**$87.25**	**$85.03**	**$89.25**	**$97.05**	**$98.21**	**$97.26**
Jan	**64,805**	**65,021**	**$88.79**	**$88.78**	**$89.19**	**$101.90**	**$99.99**	**$97.65**
Feb	**63,547**	**55,533**	**$89.48**	**$87.92**	**$89.05**	**$77.20**	**$97.01**	**$97.07**
Mar	58,753		$86.98			$95.92		
Apr	56,824		$85.94			$96.34		
May	62,655		$85.52			$93.92		
Jun	72,496		$88.32			$100.05		

III. GLOSSARY

All In Unit Energy Cost ("AIE") 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 capcity 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.