# UTILITY COMMITTEE
# A G E N D A

**AUGUST 11, 2014 - 5:00 P.M.**

**CITY HALL COUNCIL CHAMBERS**
**15 LOOCKERMAN PLAZA**
**DOVER, DELAWARE**

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

**AGENDA ADDITIONS/DELETIONS**

1. **Evaluation of Proposals and Proposed Budget Amendment - Unit 3 Cooling Tower**
   *(Staff recommends the acceptance of the revised CIP and awarding the contract for the McKee Run Unit 3 Cooling Tower Repairs (Project # EG1402) to Evaptech in the amount of $951,000)*

2. **Quarterly Review of Utility Related Capital Investment Plan (CIP) (Electric and Water/Wastewater) *(April, May, and June)***
   *(Committee action not required)*

3. **TEA/NAES Reports *(May and June)***
   *(Staff recommends acceptance of the reports)*

4. **Updates**
   *(Committee action not required on the below items)*
   - **A. Green Energy Funding and Programming**
   - **B. National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit**
   - **C. Garrison Oak Technical Park Project Updates**
     - **c-1. City Infrastructure**
     - **c-2. Calpine Energy Center**
     - **c-3. Dover Sun Park**
   - **D. Progress Update on Purchase Power Agreement**

5. **Adjournment by 5:25 p.m.**

**/tm**
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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.*

# ACTION FORM

| |
|---|
| **PROCEEDING**: Utility Committee |
| **DEPARTMENT OF ORIGIN**: Electric - Power Plant (NAES) **DATE SUBMITTED**: 08/06/2014 |
| **PREPARED BY**: Vincent Scire, Plant Manager |
| **SUBJECT**: Evaluation of Bids - McKee Run Unit 3 Cooling Tower Repairs (Project # EG1402) |
| **REFERENCE**: N/A |
| **RELATED PROJECT**: N/A |
| **REVIEWED BY**: Scott D. Koenig, P.E., City Manager; Donna Mitchell, Controller |
| **EXHIBITS**: Exhibit A – PowerPoint; Exhibit B – Original CIP Sheet; Exhibit C – Revised CIP Sheet to Accelerate EG1402 |
| **EXPENDITURE REQUIRED**: **$951,000** **AMOUNT BUDGETED**: FY 15 $1,123,000.<br>**FUNDING SOURCE (Dept./Page in CIP & Budget)**: Public Utilities- Electric Generation , McKee Run Unit 3 Cooling Tower Repairs, CIP EG1402; Overall Project Budget FY 14 &FY15 $1,156,000. |
| **TIMETABLE**: This work is scheduled to be completed in the fall of 2014 during a planned outage on Unit 3. Contract to be awarded upon Council approval. |
| **RECOMMENDED ACTION**: Staff recommends the acceptance of the revised CIP and awarding the contract for the McKee Run Unit 3 Cooling Tower Repairs (Project # EG1402) to Evaptech in the amount of $951,000 as detailed in their proposal. |

**BACKGROUND AND ANALYSIS**

The original project and budget as placed in the Draft FY-2015 Operating and Capital budget was as detailed in Exhibit B with a multi-year project budget of $1,289,000. This Project is intended to replace the fill and fill support structures on the McKee Run Unit 3 cooling tower. Also included is the replacement of the hot water basin floor and miscellaneous structural members within the tower. This contract work represents the majority of work to be performed on this project.

A Request for Proposal package was advertised according to the City purchasing policy and NAES purchasing policy. A mandatory pre-bid meeting was held and five (5) potential respondents attended this meeting. Proposals were received from four (4) vendors and one (1) vendor declined to submit. Of the submissions received, one (1) proposal was incomplete and judged to be non- conforming. The proposals were evaluated using cost, experience, and bid completeness. Two (2) vendors had equal evaluated scores; however, of those two (2) vendors, Evaptech had the lowest price.

Below is a summary of the evaluation scores and pricing:

| Contractor | Evaluation Score (out of a possible 5.00) | Vendor Base Price | Price including all adjustments |
|---|---|---|---|
| Evaptech | 4.3 | $938,280 | $951,000 |
| Cooling Tower Depot | 4.3 | $1,005,330 | $1,009,000 |
| Midwest Tower | 3.5 | $1,161,594 | $1,132,000 |
| SPX | Non-conforming | Non-conforming | Non-conforming |

As indicated in the PowerPoint presentation, the City has an opportunity to accelerate the project and complete Phases I (FY-2015) & II (FY-2016) in FY-2015 during our fall 2014 outage. If the project is accelerated as proposed, there will be an overall budget savings of approximately $80,000. The following chart proposes a re-prioritization of the FY-2015 Capital Projects at the McKee Run Power Plant to allow this project to be completed in FY-2015:

| | Element Object | Account Name | Original Budget | Net Previous Changes | Current Revised Budget | Unexp. Balance | Requested Change or Supplement | Adjusted Budget |
|---|---|---|---|---|---|---|---|---|
| FROM | (1) 487-8101-591.40-31 | EG1507- Units 1 and 2 Component Replacement | $37,000 | $0 | $37,000 | $0 | -37,000.00 | $0 |
| | (2) 487-8101-591.40-31 | EG1505 Unit #11 Component Replacement | $25,000 | $0 | $25,000 | $0 | -25,000.00 | $0 |
| | (3) 487-8101-591.40-31 | EG1504 Unit 3 Boiler System Repairs | $295,000 | $0 | $295,000 | $0 | -$157,000 | $138,000 |
| | (4) 487-8101-591.40-31 | EG1503 Unit 3 Auxiliary System Component Replacement | $160,000 | $0 | $160,000 | $0 | -$71,000 | $89,000 |
| | (5) 487-8101-591.40-31 | EG1508 McKee Run and VanSant Structural | $162,000 | $0 | $162,000 | $0 | -$26,200 | $135,800 |
| | | | | | | | | |
| TO | (6) 487-8101-591.40-31 | EG1402 - Unit #3 Cooling Tower Repairs | $676,000 | $130,800 | $806,800 | $0 | $316,200 | $1,123,000 |
| | | | | | | | | |

**Request Justification:**

(1) Project EG1507 work for FY15 deferred when decision made to remove units from service.
Additional funding needed in EG1402 due to increased work scope, in particular the replacement of the hot water basin floor and structural repairs.

(2) Project EG1505 work for FY15 deferred to FY16 due to greater need of funding for cooling tower repairs.
Additional funding needed in EG1402 due to increased work scope, in particular the replacement of the hot water basin floor and structural repairs.

(3) Project EG1504 has some work for FY15 that will be deferred to FY16 due to need for funding for cooling tower repairs.
Additional funding needed in EG1402 due to increased work scope, in particular the replacement of the hot water basin floor and structural repairs.

(4) Project EG1503 has some work for FY15 that will be deferred to FY16.
Additional funding needed in EG1402 due to increased work scope, in particular the replacement of the hot water basin floor and structural repairs.

(5) Project EG1508 has some work for FY15 that will be deferred to FY16.
Additional funding needed in EG1402 due to increased work scope, in particular the replacement of the hot water basin floor and structural repairs.

(6) Net Previous Changes of $130,800 represents FY14 carry forward balance which will be included in the first FY15 budget amendment ordinance.

Staff recommends the acceptance of the revised CIP and awarding the contract for the McKee Run Unit 3 Cooling Tower Repairs (Project # EG1402) to Evaptech in the amount of $951,000 as detailed in their proposal.

Exhibit A

NAES

CITY OF DOVER PROJECT

# Discussion
# Unit 3 Cooling Tower Repairs
# EG1402

July 24, 2014 (revised July 28, 2014)

# Planned Workscope

FY 15 & 16

- Fill and fill supports replacement
- Partial louver panel replacement.
- Some structural components will be replaced.

Additions to scope

- Distribution piping supports to be replaced
- Added replacement of the hot water basin floor and structural repairs
- Added asbestos louver replacement at selected locations

2017

- Rebuild casing walls and fan motors (2017)

# Unit 3 Cooling Tower Budgeting History

| Year of Request | Dollars budgeted | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| 2012 | | $417k | $461k | | | | $878k |
| 2013 | | | $571k | | $52k | $138k | $761k |
| 2014 | | | $42k | $571k | $52k | $138k | $803k |
| 2015 | | | $42k | $676k* | $475k* | $138k | $1,331k |

*Added replacement of the hot water basin floor and structural repairs
Note: Replacement of distribution piping and mechanical equipment, structural repairs completed in 2011

# Current Estimate Using Low Bidder Numbers

| | Contractor costs | Other expenses | Contingency | Total Estimate | Current Budget |
|---|---|---|---|---|---|
| Phase 1 (2015) | 672 | 47 | 60 | 779 | 676 |
| Phase 2 (2016) | 339 | 37 | 28 | 404 | 475 |
| Total | 1011 | 84 | 88 | 1183 | 1151 |
| | | | | | |
| Total phase 1 & 2 together | 948 | 74 | 81 | 1103 | 1151 |
| | | | | | |
| | | | | | |

# Recommendation

- Transfer $119k unused funds from EG1409 and EG1415 to EG1402 using amendment (already submitted)
- Carry over remaining funds into 2015 to cover the expected costs.
- Adjust out years funding requirements. See table below:

| | 2014 | 2015 | 2016 | 2017 | Total |
|---|---|---|---|---|---|
| 2015 budget submittal | $42k | $676k | $475k | $138k | $1,331k |
| Amendment (2014) | $161k | $676k | $475k | $138k | 1,450k |
| Carry over unused funds from 2014 and adjust 2016 and 2017 funding requirements | $32k | $795k | $375k | **$58k | 1,260k |
| Current funding needed using low bidder numbers | $32k | $779k | $404k | **$58k | $1.273k |

Alternative: perform phases 1 and 2 together in 2015.

- Savings of $80k doing both phases together
- Will need an additional $308k in 2015 in addition to the fund transfers.

**Major casing replacement scope reduced

Original CIP page in draft budget

Exhibit B

# FY 2015 DRAFT Capital Investment Plan

FY 15 *thru* FY 19

## City of Dover, Delaware

**Project #** EG1402

**Project Name** Unit 3 Cooling Tower Repairs

**New Project:** No

**Account Number:** 487-8101-591.40-31

**Time-Line:**

**Department** Power Plant

**Contact** Power Plant Manager

**Type** Maintenance

**Useful Life** Unknown

**Category** Electric

**Priority** 3

**Status** Active

**Total Project Cost:** $1,331,000

### Description

This project was developed to repair mechanical and structural components of the Unit 3 cooling tower. Specific activity scheduled for 2015 is the replacement of the tower fill, fill support structure, and other structural components within 3 cells of the tower with the remaining 2 cells being replaced in 2016. The replacement fill and fill support struture will be of an improved design which should result in improved thermal performance of the tower.

NOTE: Project costs in years beyond 2014 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation.

### Justification

The tower fill and fill support system is in a deteriorated condition and in need of replacement. The deteriorated condition has also resulted in a reduced thermal effiiciency of the tower. The project is needed to maintain the structural integrity of the cooling tower and the continued reliability of cooling system mechanical components. Significant deterioration of the tower cell fill and fill support system has occurred and has the potential of failing the tower support system. Additionally, 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.

| Prior | Expenditures | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total |
|---|---|---|---|---|---|---|---|
| 42,000 | Construction/Maintenance | 676,000 | 475,000 | 138,000 | 0 | | 1,289,000 |
| **Total** | **Total** | **676,000** | **475,000** | **138,000** | **0** | | **1,289,000** |

| Prior | Funding Sources | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total |
|---|---|---|---|---|---|---|---|
| 42,000 | Electric Revenue | 676,000 | 475,000 | 138,000 | 0 | | 1,289,000 |
| **Total** | **Total** | **676,000** | **475,000** | **138,000** | **0** | | **1,289,000** |

### Budget Impact/Other

Exhibit C - 6 pages

# Capital Investments Plan

FY 15 thru FY 19

City of Dover, Delaware

**Project #: EG1402**

**Project Name: Unit 3 Cooling Tower Repairs**



**Type:** Maintenance
**Department:** Public Utilities-Power Plant
**Useful Life:** Unknown
**Contact:** Power Plant Manager
**Category:** Electric
**Priority:** 3
**New Project:** No
**Account #:** 487-8101-591.4031
**Time-Line:**

**Total Project Cost: $1,123,000**

## Description

**This project has been revised to perform all work during the fall 2014 planned outage of unit 3 rather than performing the work in phases as originally planned.**

This project was developed to repair mechanical and structural components of the Unit 3 cooling tower. Specific activity scheduled for 2015 is the replacement of the tower fill, fill support structure, hot water distribution basin floor, and other structural components. Scope of work revised as a result of inspections of the tower performed in early 2014. The replacement fill and fill support structure will be of an improved design which should result in improved thermal performance of the tower.

**Note: Project costs in years beyond 2015 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation.**

## Justification

The tower fill and fill support system is in a deteriorated condition and in need of replacement. The deteriorated condition has also resulted in a reduced thermal efficiency of the tower. The project is needed to maintain the structural integrity of the cooling tower and the continued reliability of cooling system mechanical components. Significant deterioration of the tower cell fill and fill support system has occurred and has the potential of failing the tower support system. Additionally, 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.

| Prior | Expenditure | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Total |
|---|---|---|---|---|---|---|---|
| | Construction/Maintenance | $33,000 | $1,123,000 | | $58,000 | 0 | $1,241,000 |
| Total | **Total** | **$33,000** | **$1,123,000** | | **$58,000** | **0** | **$1,241,000** |

| Prior | Funding Sources | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Total |
|---|---|---|---|---|---|---|---|
| | Electric I & E Fund | $33,000 | $1,123,000 | | $ 58,000 | 0 | $1,241,000 |
| Total | **Total** | **$33,000** | **$1,123,000** | | **$58,000** | **0** | **$1,241,000** |

## Budget Impact/Other

# Capital Investments Plan

FY 15 thru FY 19

City of Dover, Delaware



**Project #:** EG1503

**Project Name:** McKee Run Unit 3 Auxiliary System Components

| | | | |
|---|---|---|---|
| **Type:** | Maintenance | **Department:** | Public Utilities-Power Plant |
| **Useful Life:** | Unknown | **Contact:** | Power Plant Manager |
| **Category:** | Electric | **Priority:** | 4 |
| **New Project:** | No | **Account #:** | 487-8101-591.40-31 |
| **Time-Line:** | | | |

**Total Project Cost: $140,000**

## Description

**This project has been revised to reschedule work into FY16.**

This project will perform inspections and repairs of Unit 3 auxiliary system components and includes modifications to system required to implement accelerated startup of the Unit. Focus will be on critical components. Critical auxiliary systems components are those components that could result in unit load reduction or outage with consequential loss of capacity and / or generation although they would not individually affect the long range financial viability of the unit. Components identified that will be addressed in 2015 include the replacement of the waste pit liner and 3A circulating water pump and motor inspection, and repairs to the critical piping including the installation of low point drain line from the main steam line. 3Acirculating water pump and motor repair and stack lighting replacement are rescheduled into FY2016

**Note: Project costs in years beyond 2015 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation.**

## Justification

Critical system components that, if they fail, will result in loss of generation and or capacity. Addressing these assets in a systematic fashion will result in minimizing forced outages and eliminating major maintenance expenses associated with component failure. Performing work as scheduled will also levelize maintenance expenditures. Delaying this project could result in the failure of critical unit equipment and subsequent lose of generation and/ or capacity.

| Prior | Expenditure | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Construction/Maintenance | $140,000 | $108,000 | $34,000 | $316,000 | $114,000 | $711,000 | $95,000 |
| Total | Other | | | | | | | |
| | Miscellaneous | | | | | | | |
| | **Total** | $140,000 | $108,000 | $34,000 | $316,000 | $114,000 | $711,000 | **$95,000** |

| Prior | Funding Sources | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Electric I & E Fund | $140,000 | $108,000 | $34,000 | $316,000 | $114,000 | $711,000 | $95,000 |
| Total | **Total** | $140,000 | $108,000 | $34,000 | $316,000 | $114,000 | $711,000 | **$95,000** |

## Budget Impact/Other

# Capital Investments Plan

FY 15 thru FY 19

City of Dover, Delaware

**Project #: EG1504**

**Project Name: McKee Run Unit 3 Boiler Systems**

| | | | |
|---|---|---|---|
| **Type:** | Maintenance | **Department:** | Public Utilities-Power Plant |
| **Useful Life:** | Unknown | **Contact:** | Power Plant Manager |
| **Category:** | Electric | **Priority:** | 5 |
| **New Project:** | No | **Account #:** | 487-8101-591.40-31 |
| **Time-Line:** | | | |

**Total Project Cost: $138,000**

## Description

**This project has been revised to reschedule work into FY16.**

This Project was developed to perform inspections and repairs to the Unit 3 boiler on a predetermined frequency based on unit operating hours, required regulatory inspection intervals, and known equipment condition. In general, most work activities are those requiring planned outages and therefore will be scheduled to coincide with planned outages. For 2015, work identified includes the following:

Replacement of superheater and reheater support clips

Replacement of the continuous emissions lines from stack monitors to the control building as recommended every 5 years

For 2016, work identified includes the following:

Replacement of superheater and reheater sample tubes.

Replacement of burner tubes and refractory

**Note: Project costs in years beyond 2015 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation.**

## Justification

Critical system equipment represents components that, if they fail, will result in loss of generation and or capacity. Routine evaluation of the condition of critical components will allow for proper prioritization of maintenance activities and resources. Delaying this project could result in the failure of critical unit equipment and subsequent loss of generation and or capacity. More importantly, component failure could also result in safety risk to personnel.

| Prior | Expenditure | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Construction/Maintenance | $138,000 | $157,000 | $359,000 | 0 | $236,000 | $890,000 | $135,000 |
| Total | Other | | | | | | | |
| | Miscellaneous | | | | | | | |
| | **Total** | $138,000 | $157,000 | 359,000 | 0 | $236,000 | $890,000 | $135,000 |

| Prior | Funding Sources | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Electric I & E Fund | $138,000 | $157,000 | $359,000 | 0 | $236,000 | $890,000 | $135,000 |
| Total | **Total** | $138,000 | $157,000 | $359,000 | 0 | $236,000 | $890,000 | $135,000 |

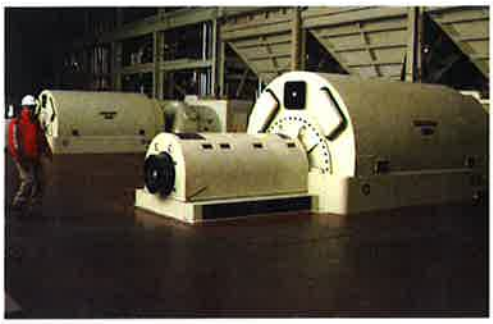
## Budget Impact/Other

# Capital Investments Plan

City of Dover, Delaware

**Project #: EG1507**

**Project Name: McKee Run Units 1 & 2 Component Repairs**



**Type:** Maintenance
**Department:** Public Utilities – Power Plant
**Useful Life:** Unknown
**Contact:** Power Plant Manager
**Category:** Electric
**Priority:** 4
**New Project:** No-Revised
**Account #:** 487-8101-591.40-31
**Time-Line:**

**Total Project Cost: $00,000 Revised**

## Description

**This project has been revised to reschedule work into FY16.**
This project will inspect and repair capital equipment associated with the Units 1 and 2 Turbine Generator, Boiler, and Auxiliary equipment.

**Note: Project costs in years beyond 2015 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation through the middle of 2017.**

## Justification

The project scope has been rescheduled to FY16 based on minimal run time expected on the Units and the impending shut down of the Units in 2017. Further modifications of the Capital Project are expected in FY16 and FY17 determined by the how the Units are dispositioned at shutdown.

| Prior | Expenditure | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Construction/Maintenance | $45,000 | | $37,000 | | | **$82,000** | |
| Total | **Total** | **$45,000** | | **$37,000** | | | **$82,000** | |

| Prior | Funding Sources | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Electric I & E Fund | $45,000 | | $37,000 | | | **$82,000** | |
| Total | **Total** | **$45,000** | | **$37,000** | | | **$82,000** | |

## Budget Impact/Other

| Budget Items | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Total |
|---|---|---|---|---|---|---|
| **Total** | | | | | | |

# Capital Investments Plan

FY 15 thru FY 19

City of Dover, Delaware



**Project #:** EG1505

**Project Name:** VanSant Unit 11 Component Replacements

**Type:** Maintenance
**Department:** Public Utilities-Power Plant
**Useful Life:** Unknown
**Contact:** Power Plant Manager
**Category:** Electric
**Priority:** 6
**New Project:** No
**Account #:** 487-8101-591.40-31
**Time-Line:**

**Total Project Cost: FY15 $0**

## Description

**This project has been revised to reschedule work into FY16.**

This fund was developed to perform inspections and repairs to the VanSant Unit 11 auxiliary equipment on a predetermined frequency based on unit operating hours, required regulatory inspection intervals, and known equipment condition. Work to be performed to include the following equipment:

Refurbish B injection water pump will be rescheduled for FY16. There will be no expenditures in FY15

**Note: Project costs in years beyond 2015 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation.**

## Justification

This project is required to fund the replacement of capital items that are expected to reach their useful life and will need to be replaced or refurbished to maintain plant system and unit reliability. 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.

| Prior | Expenditure | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Construction/Maintenance | | $93,000 | $58,000 | | $165,000 | $316,000 | $250,000 |
| Total | | | | | | | | |
| | **Total** | | $93,000 | $58,000 | | $165,000 | $316,000 | $250,000 |

| Prior | Funding Sources | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | |
|---|---|---|---|---|---|---|---|---|
| | Electric I & E Fund | | $93,000 | $58,000 | 0 | $165,000 | $316,000 | $250,000 |
| Total | **Total** | | $93,000 | $58,000 | 0 | $165,000 | $316,000 | $250,000 |

## Budget Impact/Other

| Budget Items | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Total |
|---|---|---|---|---|---|---|
| **Total** | | | | | | |

FY 15 thru FY 19

# Capital Investments Plan

City of Dover, Delaware

**Project #: EG1508**

**Project Name: McKee Run and VanSant Preservation of Structures**

| | | | |
|---|---|---|---|
| **Type:** | Maintenance | **Department:** | Public Utilities-Power Plant |
| **Useful Life:** | Unknown | **Contact:** | Power Plant Manager |
| **Category:** | Electric | **Priority:** | 9 |
| **New Project:** | No | **Account #:** | 487-5101-591.40-31 |
| **Time-Line:** | | | |

**Total Project Cost: $135,000**

## Description

**This project has been revised to reschedule work into FY16.**
This project involves the preservation of plant structures in order to prevent deterioration of building structural steel and equipment subject to corrosion due to the working environment. Included will be the sandblasting and painting of identified structures and equipment along with the removal of equipment that has been retired in place. This work is an ongoing effort spanning multiple years. Work identified includes the following: 2015 - Paint the radiator support structure and diesel cooling water tank at VanSant; Repair and paint the exterior of the circulating water piping at the base of the Unit 3 condenser; Paint all structural steel bolted connections at grade on Unit 3 boiler.
Work rescheduled into 2016 includes the paining of the cooling tower structures at VanSant.
**Note: Project costs in years beyond 2015 are shown for expense planning purposes and represent future projects related to this equipment that are anticipated based on expected operation.**

## Justification

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 and prevent further deterioration. 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 will result in the acceleration of deterioration of plant structures and larger future costs associated with structural repairs.

| Prior | Expenditure | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Construction/Maintenance | $135,000 | $221,000 | $172,000 | $220,000 | $200,000 | $907,000 | |
| Total | **Total** | $135,000 | $221,000 | $172,000 | $220,000 | $200,000 | $907,000 | |

| Prior | Funding Sources | FY 15 | FY 16 | FY 17 | FY 18 | FY 19 | Total | Future |
|---|---|---|---|---|---|---|---|---|
| | Electric I & E Fund | $135,000 | $221,000 | $172,000 | $220,000 | $200,000 | $907,000 | |
| Total | **Total** | $135,000 | $221,000 | $172,000 | $220,000 | $200,000 | $907,000 | |

## Budget Impact/Other

**City of Dover**

**Capital Investment Plan**

**Project Tracking Report**

**Quarterly Report as of June 30, 2014**

**PRELIMINARY**

**Points to Remember -**

* Original Project Budget = Original Total Project Budget initially included in approved annual budget.
* Latest Project Budget = Revised Total Project Budget included in most recent approved annual budget or one of the following: bond resolution, revolving fund loan agreement, Council approved budget amendment, or City Manager approved amendment as per the Budget Amendment Procedure.
* Current Fiscal Year - Revised Fiscal Year Budget = Current Year approved project budgets plus carry forward balances of unspent budgets in the prior fiscal year. Project Carry Forward balances will be submitted to City Council for amendment in January 2010. Can also be amended with City Manager approval per the Budget Amendment Procedure.
* Water Quality, Inflow/Infiltration, Distribution Upgrades and New Development projects are budgeted as a blanket project and once individual projects are identified and estimated they are created using an allocation of the overall budgeted amount.
* Status and Comments provided by City Manager.
* For Finance purposes projects are considered completed when placed in service and **all** charges have been processed.

| Current Year Budget Funding Sources | General | Community Transportation | Water & Wastewater | Electric | Total CIP |
|---|---|---|---|---|---|
| Budget Balance | $ 2,941,200 | $ 130,300 | $ 5,199,600 | $ 506,300 | $ 8,777,400 |
| Restricted MSA (non Public Safety) | 251,200 | - | - | - | 251,200 |
| Contractor Contributions | 264,800 | - | - | - | 264,800 |
| General Billings for Reimbursement of Expense | - | - | - | 440,000 | 440,000 |
| Debt Financing | - | - | 4,195,900 | - | 4,195,900 |
| Other State/Federal Grants | 165,000 | - | - | - | 165,000 |
| Impact Fee Reserves | - | - | - | - | - |
| State Community Transportation Funds | 60,500 | 1,387,600 | - | - | 1,448,100 |
| Gifts/Donations | 5,000 | - | - | - | 5,000 |
| Transfer from Impact Fee Reserve | - | - | 1,000,000 | - | 1,000,000 |
| Transfer from General Fund | 1,448,800 | - | - | | 1,448,800 |
| Transfer from Operating Funds | - | - | 2,563,200 | 4,918,600 | 7,481,800 |
| Transfer from Parkland Reserve | 80,000 | - | - | - | 80,000 |
| Interest Income | - | 500 | 25,000 | 25,200 | 50,700 |
| Total Funding Sources (Unaudited) | $ 5,216,500 | $ 1,518,400 | $ 12,983,700 | $ 5,890,100 | $ 25,608,700 |

**City of Dover**
**General Fund - Major CIP Projects**
**Quarterly Report as of June 30, 2014**
**PRELIMINARY**

| | | | | TOTAL PROJECT - PAST, CURRENT & FUTURE BUDGETS | | | | | CURRENT FISCAL YEAR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Project Code | Type | Description | Original Project Budget | Latest Project Budget | Project To Date Expenses | Project Budget Balance | % Budget Spent | Current Fiscal Year Budget | Revised Fiscal Year Budget | Fiscal YTD Expenses | Budget Balance | % Budget Spent | Status | Comments |
| 1 | | | **FY 2009** | | | | | | | | | | | | |
| 2 | LB0901 | M/G/L | New Library Project | $ 18,200,000 | $ 20,469,100 | $ 20,452,235 | $ 16,865 | 99.9% | $ - | $ 411,500 | $ 78,136 | $ 333,364 | 19.0% | Complete | LEED Certification complete in FY 2014 |
| 3 | | | **Totals - FY 2009** | $ 18,200,000 | $ 20,469,100 | $ 20,452,235 | $ 16,865 | 99.9% | $ - | $ 411,500 | $ 78,136 | $ 333,364 | 19.0% | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | **FY 2013** | | | | | | | | | | | | |
| | MR1301 | | Security Cameras (Mayor) | | | | | | $ - | $ 54,200 | $ 54,160 | $ 40 | 99.9% | | |
| 6 | PR1301 | | Roof Replacement @ Dover Park | 30,000 | $ 30,000 | $ 6,995 | $ 23,005 | 23.3% | - | - | - | - | 0.0% | On Hold | Asbestos survey done of building; Future plans for building being evaluated |
| 7 | ST1302 | | Street & Alley Program | - | 1,414,500 | - | 1,414,500 | 0.0% | - | - | - | - | 0.0% | FY 2014 | Moved to General Capital Projects Fund |
| 8 | ST1304 | | Garrison Farm Improvements | 1,924,000 | 2,000,000 | 295,192 | 1,704,808 | 14.8% | - | 231,300 | 231,255 | 45 | 100.0% | In process | Financed by Future Capacity Reserve |
| 9 | ST1405 | G | FY 2012 MSA - Capital non-safety | - | 265,215 | 190,176 | 75,039 | 71.7% | - | 251,200 | 176,213 | 74,987 | 70.1% | In process | Restricted MSA Funding |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | **Totals - FY 2013** | $ 1,954,000 | $ 3,709,715 | $ 492,363 | $ 3,217,352 | 13.3% | $ - | $ 536,700 | $ 461,628 | $ 75,072 | 86.0% | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | **FY 2014** | | | | | | | | | | | | |
| 14 | --- | | Vehicles & Equipment | $ 963,800 | $ 1,003,200 | $ 903,078 | $ 100,122 | 90.0% | $ 908,800 | $ 1,003,200 | $ 903,078 | $ 100,122 | 90.0% | In process | |
| | ST1304 | | Unallocated | - | 1,704,800 | - | 1,704,800 | 0.0% | - | 1,704,800 | - | 1,704,800 | 0.0% | | |
| 15 | CS1402 | | Security Cameras/Fence | 55,000 | 55,000 | - | 55,000 | 0.0% | 55,000 | 55,000 | - | 55,000 | 0.0% | | |
| 16 | FR1400 | | Annual Contribution to Robbins Hose | 238,500 | 238,500 | 238,515 | (15) | 100.0% | 238,500 | 238,500 | 238,515 | (15) | 100.0% | Complete | Truck Payments |
| 17 | IT1400 | | Server & Backup Solution | 7,000 | 7,000 | - | 7,000 | 0.0% | 7,000 | 7,000 | - | 7,000 | 0.0% | | |
| 18 | PD1401 | | Copier Replacement | 10,000 | 9,100 | 8,865 | 235 | 97.4% | 10,000 | 9,100 | 8,865 | 235 | 97.4% | In process | |
| 19 | PD1402 | | Totaled Vehicle Replacement | 20,000 | - | - | - | 0.0% | 20,000 | - | - | - | 0.0% | Cancelled | |
| 20 | PR1401 | | A/C System @ Pitts Center | 65,000 | 65,000 | - | 65,000 | 0.0% | 65,000 | 65,000 | - | 65,000 | 0.0% | | |
| 21 | PR1402 | | Schutte Park Land Improvement | 30,000 | 36,500 | 1,424 | 35,076 | 3.9% | 30,000 | 36,500 | 1,424 | 35,076 | 3.9% | | |
| 22 | PR1403 | | Demolition @ White Oak Park | - | 70,500 | 4,404 | 66,096 | 6.2% | - | 70,500 | 4,404 | 66,096 | 6.2% | | |
| 23 | ST1402 | | FY 2014 Concrete Program | 70,000 | 45,500 | 3,235 | 42,265 | 7.1% | 70,000 | 45,500 | 3,235 | 42,265 | 7.1% | In process | Bids going out in February |
| 24 | ST1403 | B/L | FY 2014 Bonded Street Program | 740,000 | 692,100 | 501,708 | 190,392 | 72.5% | - | 692,100 | 501,708 | 190,392 | 72.5% | In process | Approximately 70% complete |
| 25 | PD1302 | | Police Parking Lot | 50,000 | 51,800 | - | 51,800 | 0.0% | - | 51,800 | - | 51,800 | 0.0% | | |
| 26 | ST1404 | | Village of Westover IV | 264,800 | 264,800 | 135,431 | 129,369 | 51.1% | - | 264,800 | 135,431 | 129,369 | 51.1% | | |
| 27 | ST1406 | | Wesley College Infrastructure Reimb | 24,500 | 24,500 | | 24,500 | 0.0% | - | 24,500 | 24,500 | - | 100.0% | | |
| 28 | | | | | | | | | | | | | | | |
| 29 | | | **Totals - FY 2014** | $ 2,538,600 | $ 4,268,300 | $ 1,796,661 | $ 2,471,639 | 42.1% | $ 1,404,300 | $ 4,268,300 | $ 1,821,161 | $ 2,447,139 | 42.7% | | |
| 30 | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | |
| 32 | | | **Grand Totals** | $ 22,692,600 | $ 28,447,115 | $ 22,741,259 | $ 5,705,856 | 79.9% | $ 1,404,300 | $ 5,216,500 | $ 2,360,925 | $ 2,855,575 | 45.3% | | |

Legend

M = Multi-year project - a project with a specific schedule to occur over multiple years.
R = Recurring project - a project that begins and ends each fiscal year and is re-budgeted to start over each fiscal year.
G = Grant funded project
B/L = To be financed through bonds or commercial loan.

**City of Dover**

**Community Transportation & General Fund Street Funds - Major CIP Projects (Final)**

**Quarterly Report as of June 30, 2014**

**PRELIMINARY**

| | | | | TOTAL PROJECT - PAST, CURRENT & FUTURE BUDGETS | | | | | CURRENT FISCAL YEAR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Project Code | Type | Description | Original Project Budget | Latest Project Budget | Project To Date Expenses | Project Budget Balance | % Budget Spent | Current Fiscal Year Budget | Revised Fiscal Year Budget | Fiscal YTD Expenses | Budget Balance | % Budget Spent | Status | Comments |
| 1 | | | **FY 2002** | | | | | | | | | | | | |
| 2 | CT0212 | | South Street paving | $ 80,400 | $ 80,400 | $ 42,198 | $ 38,202 | 52.5% | $ - | $ 80,400 | $ 42,198 | $ 38,202 | 52.5% | | Complete |
| 3 | | | **Totals - FY 2002** | $ 80,400 | $ 80,400 | $ 42,198 | $ 38,202 | 52.5% | $ - | $ 80,400 | $ 42,198 | $ 38,202 | 52.5% | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | **FY 2009** | | | | | | | | | | | | |
| 6 | CT0555 | | Little League Park paving | $ 11,600 | $ 11,600 | $ - | $ 11,600 | 0.0% | $ - | $ - | $ - | $ - | 0.0% | | Re-program for signage |
| 7 | | | **Totals - FY 2009** | $ 11,600 | $ 11,600 | $ - | $ 11,600 | 0.0% | $ - | $ - | $ - | $ - | 0.0% | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | **FY 2007** | | | | | | | | | | | | |
| 10 | CT0708 | | E. Water Street Brick | $ 65,000 | $ 65,000 | $ - | $ 65,000 | 0.0% | $ - | $ - | $ - | $ - | 0.0% | | Specialty contract needed |
| 11 | | | **Totals - FY 2007** | $ 65,000 | $ 65,000 | $ - | $ 65,000 | 0.0% | $ - | $ - | $ - | $ - | 0.0% | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | **FY 2009** | | | | | | | | | | | | |
| 14 | CT0977 | M | Schutte Parking Lot | $ 22,000 | $ 22,000 | $ - | $ 22,000 | 0.0% | $ - | $ - | $ - | $ - | 0.0% | | Trying to re-program for Schutte park sidewalk |
| 15 | | | **Totals - FY 2009** | $ 22,000 | $ 22,000 | $ - | $ 22,000 | 0.0% | $ - | $ - | $ - | $ - | 0.0% | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | **FY 2012** | | | | | | | | | | | | |
| 18 | CT1201 | M | North Street Roundabout | $ 500,000 | $ 572,200 | $ 554,365 | $ 17,835 | 96.9% | $ - | $ 572,200 | $ 554,365 | $ 17,835 | 96.9% | 35% | Site work initiated |
| 19 | TE0601 | M | Lincoln Park Center | 900,000 | 1,423,500 | 523,277 | 900,223 | 36.8% | - | - | - | - | 0.0% | Started | On-going |
| 20 | | | **Totals - FY 2012** | $ 1,400,000 | $ 1,995,700 | $ 1,077,642 | $ 918,058 | 54.0% | $ - | $ 572,200 | $ 554,365 | $ 17,835 | 96.9% | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | **FY 2013** | | | | | | | | | | | | |
| 23 | CT1317 | | Wesley College Phase I | 148,600 | 119,240 | 119,240 | (0) | 100.0% | $ - | $ 79,985 | $ 79,985 | $ 0 | 100.0% | | Complete awaiting bill |
| 24 | MR1301 | | Transfer to General Fund for Security Cameras | 102,400 | 102,400 | 102,440 | (40) | 100.0% | - | 54,200 | 54,200 | - | 100.0% | | Prior year unused GF Allocation moved to Capital Project Fund. |
| 25 | CT1369 | | Bayard Ave, Orchard Ave & Morris Dr. | 130,000 | 289,378 | 264,670 | 24,708 | 91.5% | - | 289,378 | 264,670 | 24,708 | 91.5% | | FY 2013 CT agreement |
| 26 | | | **Totals - FY 2013** | $ 381,000 | $ 511,018 | $ 486,350 | $ 24,668 | 95.2% | $ - | $ 423,563 | $ 398,855 | $ 24,708 | 94.2% | | |
| 27 | | | | | | | | | | | | | | | |
| 28 | | | **FY 2014** | | | | | | | | | | | | |
| 29 | CTxxxx | | Unapplied CT Projects (placeholder) | $ 500,000 | $ 500,000 | $ - | $ 500,000 | 0.0% | $ 500,000 | $ 342,437 | $ - | $ 342,437 | 0.0% | | Future CT Agreements |
| | | | Operating transfer to General Fund | - | 60,500 | 6,300 | 54,200 | 0.0% | - | 6,300 | 6,300 | - | 100.0% | | |
| 30 | CT1405 | | Lakeview Drive | 24,400 | 24,400 | - | 24,400 | 0.0% | 24,400 | 24,400 | - | 24,400 | 0.0% | | |
| 31 | ST1401 | | American Ave | - | 69,100 | 62,800 | 6,300 | 90.9% | - | 69,100 | 62,800 | 6,300 | 90.9% | | Prior year unused GF Allocation |
| 32 | | | **Totals - FY 2014** | $ 524,400 | $ 654,000 | $ 69,100 | $ 584,900 | 10.6% | $ 524,400 | $ 442,237 | $ 69,100 | $ 373,137 | 15.6% | | |
| 33 | | | | | | | | | | | | | | | |
| 34 | | | **Grand Totals** | $ 2,484,400 | $ 3,339,718 | $ 1,675,290 | $ 1,664,428 | 50.2% | $ 524,400 | $ 1,518,400 | $ 1,064,517 | $ 453,883 | 70.1% | | |

Legend

M = Multi-year project - a project with a specific schedule to occur over multiple years.

R = Recurring project - a project that begins and ends each fiscal year and is re-budgeted to start over each fiscal year.

C = Project funded by combination of CT Funds and General Fund

B/L = To be financed through bonds or commercial loan.

**Water/Wastewater Improvement & Extension Fund - Major CIP Projects**
**Quarterly Report as of June 30, 2014**
**PRELIMINARY**

| | Project Code | Type | Description | TOTAL PROJECT - PAST, CURRENT & FUTURE BUDGETS: Original Project Budget | Latest Project Budget | Project To Date Expenses | Project Budget Balance | % Budget Spent | CURRENT FISCAL YEAR: Approved Fiscal Year Budget | Revised Fiscal Year Budget | Fiscal YTD Expenses | Budget Balance | % Budget Spent | Status / % Complete | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | **FY 2008** | | | | | | | | | | | | |
| 2 | WD0804 | M | 1.0 MG Elevated Water Storage | $ 4,196,600 | $ 2,556,000 | $ 85,327 | $ 2,470,673 | 3.3% | $ 390,000 | $ 2,473,500 | $ 2,779 | $ 2,470,721 | 0.1% | 3.2% | Design & land purchase underway |
| 3 | WD0805 | M | Piney Point Well | 398,800 | 1,096,200 | 1,093,202 | 2,998 | 99.7% | - | 580,000 | 577,064 | 2,936 | 99.5% | 85.0% | Awarded bid JJID Feb. 2013 |
| 4 | | | **Totals - FY 2008** | $ 4,595,400 | $ 3,652,200 | $ 1,178,530 | $ 2,473,670 | 32.3% | $ 390,000 | $ 3,053,500 | $ 579,842 | $ 2,473,658 | 19.0% | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | **FY 2009** | | | | | | | | | | | | |
| 7 | WQ0907 | SL/O | Rt. 13 Water Main | $ 1,023,700 | $ 2,467,600 | $ 2,314,772 | $ 152,828 | 93.8% | $ - | $ 294,400 | $ 141,577 | $ 152,823 | 48.1% | 100.0% | Complete 6/30/13, in Litigation |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | **FY 2010** | | | | | | | | | | | | |
| 10 | WW1010 | I | Tar Ditch Interceptor Upgrade | $ 518,200 | $ 518,200 | $ 50,082 | $ 468,118 | 9.7% | $ - | $ 486,300 | $ 18,110 | $ 468,190 | 3.7% | 6.2% | Easement request sent to residents |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | **FY 2013** | | | | | | | | | | | | |
| 13 | WW1304 | M | Garrison Farm Improvements | $ 1,828,000 | $ 3,116,000 | $ 534,880 | $ 2,581,120 | 17.2% | $ - | $ 3,116,000 | $ 426,718 | $ 2,689,282 | 13.7% | In Process | Project awarded on 1/27, pre construction meeting to follow. |
| 14 | WD1302 | M | Garrison Farm Storage Tank | 1,828,000 | 3,116,000 | 455,389 | 2,660,611 | 14.6% | - | 4,022,400 | 242,793 | 3,779,607 | 6.0% | In Process | Project awarded, 95% design, construction to begin in Spring. |
| 15 | II1306 | | FY 2013 I & I Design | 1,000,000 | 748,900 | 22,608 | 726,292 | 3.0% | - | - | - | - | 0.0% | | Project designed, re-programmed for out year. |
| 16 | II1404 | | Basin #5 I & I Buck Drive | - | 342,000 | 39,151 | 302,849 | 11.4% | - | 342,000 | 39,151 | 302,849 | 11.4% | In Process | Project under design, 60% complete. |
| 17 | II1309 | | Dover Downs PS Upgrade | - | 16,000 | 15,864 | 136 | 99.2% | - | 16,000 | 15,864 | 136 | 99.2% | Complete | Completed by September 2013 |
| 18 | II1310 | | Puncheon Run PS Upgrade | - | 21,000 | 20,020 | 980 | 95.3% | - | 21,000 | 20,020 | 980 | 95.3% | Complete | Completed in July 2013 |
| 19 | | | **Totals - FY 2013** | $ 4,656,000 | $ 7,359,900 | $ 1,087,912 | $ 6,271,988 | 31.6% | $ - | $ 7,517,400 | $ 744,546 | $ 6,772,854 | 9.9% | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | **FY 2013** | | | | | | | | | | | | |
| 22 | --- | | Vehicles & Equipment | $ 354,000 | $ 153,600 | $ 152,390 | $ 1,210 | 99.2% | $ 354,000 | $ 153,600 | $ 152,390 | $ 1,210 | 99.2% | In Process | All vehicles have been ordered, awaiting delivery #422 (2/6/14) |
| 23 | WD1401 | | Wellhead Redevelopment | 75,000 | 75,000 | 71,558 | 3,442 | 95.4% | 75,000 | 75,000 | 71,558 | 3,442 | 95.4% | In Process | Contractor completed one wellhead redevelopment, started on second. |
| 24 | WD1403 | | Emergency Generators | 80,000 | 60,000 | 58,468 | 1,532 | 97.4% | 80,000 | 60,000 | 58,468 | 1,532 | 97.4% | In Process | Generator ordered, delivery late Feb. |
| 25 | WW1401 | | Inflow/Infiltration Removal | 1,003,800 | 406,900 | - | 406,900 | 0.0% | 1,013,800 | 406,900 | - | 406,900 | 0.0% | In Process | Buck Drive 60% designed |
| 26 | WD1402 | | Denny's Road Water Main | - | 33,200 | 19,700 | 13,500 | 59.3% | - | 33,200 | 19,700 | 13,500 | 59.3% | In Process | Design 95% complete, DelDOT to bid out |
| 27 | WD1201 | I | Pay-As-You-Go Water Station | - | 30,200 | - | 30,200 | 0.0% | - | 30,200 | - | 30,200 | 0.0% | | Staff finalizing bid documents |
| 28 | WD1304 | | Columbia Well | - | 34,800 | 25 | 34,775 | 0.1% | - | 34,800 | 25 | 34,775 | 0.1% | | no update |
| 29 | WQ1402 | | West Dover Connector | - | 11,000 | 11,000 | 0 | 100.0% | - | 11,000 | 11,000 | 0 | 100.0% | In Process | Design continuing, out to bid April 2014 |
| 30 | WQ1401 | | Water Quality Improvements | 905,000 | - | - | - | 0.0% | 905,000 | - | - | - | 0.0% | | no update |
| 31 | WW1204 | | Baltray Pump Station | - | 104,100 | 6,317 | 97,783 | 6.1% | - | 104,100 | 6,317 | 97,783 | 6.1% | In Process | Design complete. Purchase materials in February 2014 |
| 32 | WW1205 | | Dover Brook Pump Station | - | 52,800 | 1,435 | 51,365 | 2.7% | - | 52,800 | 1,435 | 51,365 | 2.7% | | Bids due April 15, 2014. |
| 33 | WW1206 | | Brandywine Pump Station | - | 368,100 | 2,600 | 365,500 | 0.7% | - | 368,100 | 2,600 | 365,500 | 0.7% | In Process | Design 95% complete, need to acquire |
| 34 | WW1207 | | McKee PS | - | 47,300 | - | 47,300 | 0.0% | - | 47,300 | - | 47,300 | 0.0% | | Need to rebid project. |
| 35 | WW1301 | | Hazeltville Rd Interceptor | - | 20,400 | 4,054 | 16,346 | 19.9% | - | 20,400 | 4,054 | 16,346 | 19.9% | | Survey to begin in coming weeks. |
| 36 | WW1302 | | Lakeview PS | - | 52,700 | 37,637 | 15,063 | 71.4% | - | 52,700 | 37,637 | 15,063 | 71.4% | | Survey to begin in coming weeks. |
| 37 | WW1303 | | Westover PS | - | 69,200 | 46,743 | 22,457 | 67.5% | - | 69,200 | 46,743 | 22,457 | 67.5% | | Survey to begin in coming weeks. |
| 38 | II1401 | | Kent Ave. Repair | - | 75,000 | 32,209 | 42,791 | 42.9% | - | 75,000 | 32,209 | 42,791 | 42.9% | In Process | 95% complete |
| 39 | II1402 | | West Dover Connector | - | 37,800 | 33,264 | 4,536 | 88.0% | - | 37,800 | 33,264 | 4,536 | 88.0% | | Design continuing, out to bid April 2014 |
| 40 | | | **Totals - FY 2014** | $ 2,417,800 | $ 1,632,100 | $ 477,399 | $ 1,154,701 | 0.0% | $ 2,427,800 | $ 1,632,100 | $ 477,399 | $ 1,154,701 | 29.3% | | |
| 41 | | | | | | | | | | | | | | | |
| 42 | | | **Grand Totals** | $ 13,211,100 | $ 15,630,000 | $ 5,108,694 | $ 10,521,306 | 32.7% | $ 2,817,800 | $ 12,983,700 | $ 1,961,474 | $ 11,022,226 | 15.1% | | |

Legend
M = Multi-year project - a project with a specific schedule to occur over multiple years.
R = Recurring project - a project that begins and ends each fiscal year and is re-budgeted to start over each fiscal year.
SL = State Loan Project - construction phase is financed
I = Impact Fee (partially) financed project
O = Operating revenues

**Electric Improvement & Extension Fund - Major CIP Projects**
**Quarterly Report as of June 30, 2014**
**PRELIMINARY**

| | | | | TOTAL PROJECT - PAST, CURRENT & FUTURE BUDGETS | | | | | CURRENT FISCAL YEAR | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Project Code | Type | Description | Original Project Budget | Latest Project Budget | Project To Date Expenses | Project Budget Balance | % Budget Spent | Current Fiscal Year Budget | Revised Fiscal Year Budget | Fiscal YTD Expenses | Budget Balance | % Budget Spent | Status | Comments |
| 1 | | | **FY2012** | | | | | | | | | | | | |
| 2 | EG1212 | M | Unit 3 Turbine Inspection/Repair | $ 1,494,000 | $ 1,653,536 | $ 1,561,756 | $ 91,780 | 94.4% | $ 1,149,800 | $ 1,149,800 | $ 1,058,020 | $ 91,780 | 92.0% | In process | Will complete Spring Outage |
| 3 | EG1214 | M | Industrial WW Discharge System | 272,000 | 272,000 | 283,767 | (11,767) | 104.3% | - | 8,000 | 9,418 | (1,418) | 117.7% | Complete | Expenses are a 100% complete |
| 4 | | | **Totals - FY 2012** | $ 1,766,000 | $ 1,925,536 | $ 1,845,523 | $ 80,013 | 95.8% | $ 1,149,800 | $ 1,157,800 | $ 1,067,438 | $ 90,362 | 92.2% | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | **FY 2013** | | | | | | | | | | | | |
| 7 | EE1308 | M | Horsepond Substation Upgrade | $ 761,800 | $ 761,800 | $ 619,526 | $ 142,274 | 81.3% | $ 591,800 | $ 1,301,100 | $ 588,675 | $ 712,425 | 45.2% | In process | Under Construction |
| 8 | EE1312 | M | General Scott Switchgear | 1,155,000 | 1,150,000 | 17,374 | 1,132,626 | 1.5% | 800,000 | 55,000 | 17,374 | 37,626 | 31.6% | In process | Under Design |
| 9 | EE1314 | | Capitol Park Upgrade | - | 347,872 | 320,423 | 27,449 | 92.1% | | 248,000 | 220,551 | 27,449 | 88.9% | In process | Under Construction |
| 10 | EE1330 | | Morris Estates 1 Upgrade | - | 275,000 | 254,047 | 20,953 | 92.4% | - | 32,600 | 11,647 | 20,953 | 35.7% | In process | Under Construction |
| 11 | EG1312 | | Generator Repairs | - | 4,200 | - | 4,200 | 0.0% | - | 4,200 | - | 4,200 | 0.0% | Complete | Expenses are a 100% complete |
| 12 | | | **Totals - FY 2013** | $ 1,916,800 | $ 2,538,872 | $ 1,211,369 | $ 1,327,503 | 47.7% | $ 1,391,800 | $ 1,640,900 | $ 838,247 | $ 802,653 | 51.1% | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | **FY 2014** | | | | | | | | | | | | |
| 15 | --- | | Vehicles & Equipment | $ 660,000 | $ 704,600 | $ 275,360 | $ 429,240 | 39.1% | $ 660,000 | $ 704,600 | $ 275,360 | $ 429,240 | 39.1% | In Process | Ordered |
| 16 | EE1401 | | Air Condition Replacement Monitors | 12,000 | 8,200 | 8,200 | - | 100.0% | 8,200 | 8,200 | 8,200 | - | 100.0% | | |
| 17 | EE1402 | | Substation Battery Replacement | 24,500 | 24,500 | 23,185 | 1,315 | 94.6% | 24,500 | 24,500 | 23,185 | 1,315 | 94.6% | In Process | Under Design |
| 18 | EE1403 | | Distribution Upgrades | 400,000 | 61,000 | - | 61,000 | 0.0% | 400,000 | 61,000 | - | 61,000 | 0.0% | | |
| 19 | EE1404 | | Lighting Improvements | 50,000 | 50,000 | 46,920 | 3,080 | 93.8% | 50,000 | 50,000 | 46,920 | 3,080 | 93.8% | In Process | Under Construction |
| 20 | EE1405 | | Distribution Feeder Replacement Program | 277,500 | - | - | - | 0.0% | 277,500 | - | - | - | 0.0% | | |
| 21 | EE1406 | | Distribution Capacitors & Controls | 60,000 | 60,000 | 31,484 | 28,516 | 52.5% | 60,000 | 60,000 | 31,484 | 28,516 | 52.5% | Complete | Complete |
| 22 | EE1407 | | Transmission Line Maintenance Program | 75,000 | - | - | - | 0.0% | 75,000 | - | - | - | 0.0% | | |
| 23 | EE1408 | | Substation Switch Replacement | 80,000 | - | - | - | 0.0% | 80,000 | - | - | - | 0.0% | | |
| 24 | EE1410 | | Air Mobility Command | - | 13,500 | 34,174 | (20,674) | 253.1% | - | 13,500 | 34,174 | (20,674) | 253.1% | In Process | New Design |
| 25 | EE1411 | | Bergald Lane (DAFB) | - | 29,000 | 28,709 | 291 | 99.0% | - | 28,800 | 28,709 | 91 | 99.7% | Complete | Complete |
| 26 | EE1412 | | Capital City Trail | - | 22,700 | 21,448 | 1,252 | 94.5% | - | 22,700 | 21,448 | 1,252 | 94.5% | Complete | Complete |
| 27 | EE1413 | | Lebanon 400 Feeder | - | 20,000 | 18,710 | 1,290 | 93.6% | - | 20,000 | 18,710 | 1,290 | 93.6% | In Process | Material Ordered |
| 28 | EE1414 | | New Developments | 600,000 | 93,700 | 89 | 93,611 | 0.1% | 600,000 | 93,700 | 89 | 93,611 | 0.1% | | |
| 29 | EE1417 | | Bayside Drive (Persimmon Tree to White Oak Rd) | - | 42,300 | 38,634 | 3,666 | 91.3% | - | 42,300 | 38,634 | 3,666 | 91.3% | Complete | Complete |
| 30 | EE1418 | | The Grande | - | 28,000 | 10,068 | 17,932 | 36.0% | - | 28,000 | 10,068 | 17,932 | 36.0% | Complete | Complete |
| 31 | EE1419 | | Home 2 Suites Hotel | - | 37,000 | 38,534 | (1,534) | 104.1% | - | 37,000 | 38,534 | (1,534) | 104.1% | In Process | Under Construction |
| 32 | EE1421 | | Richardson Circle Upgrade | - | 91,000 | 89,740 | 1,260 | 98.6% | - | 91,000 | 89,740 | 1,260 | 98.6% | In Process | Under Construction |
| 33 | EE1423 | | 7-Eleven New Service | - | 5,800 | 4,397 | 1,403 | 75.8% | - | 5,300 | 4,397 | 903 | 83.0% | Complete | Complete |
| 34 | EE1424 | | McKee Run Substation Repairs | - | 36,800 | - | 36,800 | 0.0% | - | 36,800 | 35,820 | 980 | 97.3% | In Process | Under Construction |
| 35 | EE1425 | | EZ-Pass Delaware | - | 12,000 | 9,351 | 2,649 | 77.9% | - | 10,800 | 9,351 | 1,449 | 86.6% | Complete | Complete |
| 36 | EE1426 | | Eden Hill Entrance | - | 52,400 | 44,836 | 7,564 | 85.6% | - | 52,400 | 44,836 | 7,564 | 85.6% | In Process | Under Construction |
| 37 | EE1428 | | Tidewater General Green | - | 34,000 | 17,248 | 16,752 | 50.7% | - | 19,600 | 17,248 | 2,352 | 88.0% | In Process | Under Construction |
| 38 | EE1429 | | Clearview Meadows | - | 88,000 | 4,108 | 83,892 | 4.7% | - | 85,300 | 4,108 | 81,192 | 4.8% | | Not Started |
| 39 | EE1430 | | Calpine Equipment Move | - | 37,600 | 37,521 | 79 | 99.8% | - | 37,600 | 37,521 | 79 | 99.8% | Complete | Complete |
| 40 | EE1431 | | Generals Green Lighting | - | 20,500 | 10,747 | 9,753 | 52.4% | - | 20,500 | 10,747 | 9,753 | 52.4% | In Process | Under Construction |
| 41 | EE1432 | | Connective @ 409 Pickering Beach Rd | - | 20,200 | 1,182 | 19,018 | 5.9% | - | 20,200 | 1,182 | 19,018 | 5.9% | In Process | Under Construction |
| 42 | EE1433 | | Chandale Airport | - | - | 47,301 | (47,301) | 0.0% | - | - | 47,301 | (47,301) | 0.0% | | |
| 43 | EE1434 | | 50 Wolfcreek - Dr. Patel | - | 6,100 | 4,345 | 1,755 | 71.2% | - | 6,100 | 4,345 | 1,755 | 71.2% | In Process | Under Construction |
| 44 | EE1435 | | Patriot Village | - | 29,900 | 27,563 | 2,337 | 92.2% | - | 29,900 | 27,563 | 2,337 | 92.2% | In Process | Under Construction |
| 45 | EE1437 | | DP & L Donas Landing Road | - | 15,000 | 7,081 | 7,919 | 47.2% | - | 15,000 | 7,081 | 7,919 | 47.2% | | |
| 46 | EE1438 | | Dover Downs Tower | - | 53,800 | - | 53,800 | 0.0% | - | 53,800 | - | 53,800 | 0.0% | | |
| 47 | EE1439 | | Family Dollar Store | - | 9,800 | - | 9,800 | 0.0% | - | 9,800 | - | 9,800 | 0.0% | | |
| 48 | EE1440 | | Kraft Foods 69KV Temp | - | 10,000 | 5,739 | 4,261 | 57.4% | - | 10,000 | 5,739 | 4,261 | 57.4% | | |
| 49 | EE1443 | | GOTP Transmission Line Relocation | - | 550,000 | - | 550,000 | 0.0% | | 550,000 | - | 550,000 | 0.0% | | Unplanned project |
| 50 | EG1402 | | Unit 3 Cooling Tower Repairs | 42,000 | 42,000 | 31,785 | 10,215 | 75.7% | 42,000 | 42,000 | 31,785 | 10,215 | 75.7% | In Process | Will complete Spring outage - PO for work issued |
| 51 | EG1404 | | McKee Run #3 Aux System Component | 116,000 | 116,000 | 113,016 | 2,984 | 97.4% | 116,000 | 116,000 | 113,016 | 2,984 | 97.4% | In Process | Will complete Spring outage |
| 52 | EG1405 | | VanSant #11 Component Replacement | 32,000 | 32,000 | 30,588 | 1,412 | 95.6% | 32,000 | 32,000 | 30,588 | 1,412 | 95.6% | In Process | Will complete Spring outage |
| 53 | EG1406 | | McKee Run Energy Pipe Replacement | 80,000 | 80,000 | 53,514 | 26,486 | 66.9% | 80,000 | 80,000 | 53,514 | 26,486 | 66.9% | In Process | Will complete Spring outage - PO for work issued |
| 54 | EG1407 | | Metering System Upgrades | 25,000 | 25,000 | - | 25,000 | 0.0% | 25,000 | 25,000 | - | 25,000 | 0.0% | In Process | Multi-year project - Design to be complete Spring |
| 55 | EG1408 | | McKee/VanSant Safety & Compliance | 86,000 | 86,000 | 22,926 | 63,074 | 26.7% | 86,000 | 86,000 | 22,926 | 63,074 | 26.7% | In Process | Will complete in Spring |
| 56 | EG1409 | | McKee Run Natural Gas Valves | 65,000 | 65,000 | 18,152 | 46,848 | 27.9% | 65,000 | 65,000 | 18,152 | 46,848 | 27.9% | In Process | Will complete Spring outage |
| 57 | EG1413 | | McKee/VanSant Preserve Structure | 42,000 | 42,000 | - | 42,000 | 0.0% | 42,000 | 42,000 | - | 42,000 | 0.0% | In Process | Work on hold pending additional funds needed |
| 58 | EG1415 | | McKee Run Units 1 & 2 component Replacement | 105,000 | 105,000 | 31,173 | 73,827 | 29.7% | 105,000 | 105,000 | 31,173 | 73,827 | 29.7% | In Process | Will Complete spring outage |
| 59 | EG1416 | | VanSant Capacity Increase | 250,000 | 250,000 | 98,056 | 151,944 | 39.2% | 250,000 | 250,000 | 98,056 | 151,944 | 39.2% | In Process | Multi-year project - Design to be complete Spring |
| 60 | | | | | | | | | | | | | | | |
| 61 | | | **Totals - FY 2014** | $ 3,082,000 | $ 3,110,400 | $ 1,285,882 | $ 1,824,518 | 0.0% | $ 3,078,200 | $ 3,091,400 | $ 1,321,702 | $ 1,769,698 | 42.8% | | |
| 62 | | | | | | | | | | | | | | | |
| 63 | | | **Grand Totals** | $ 6,764,800 | $ 7,574,808 | $ 4,342,774 | $ 3,232,034 | 26.5% | $ 5,619,800 | $ 5,890,100 | $ 3,227,388 | $ 2,662,712 | 54.8% | | |

Legend
M = Multi-year project - a project with a specific schedule to occur over multiple years.
R = Recurring project - a project that begins and ends each fiscal year and is re-budgeted to start over each fiscal year.
B = Bonded Project
S = State fully or partially reimbursed project

# The Energy Authority, Inc.

Monthly Management Committee Update – May 2014

June 26, 2014

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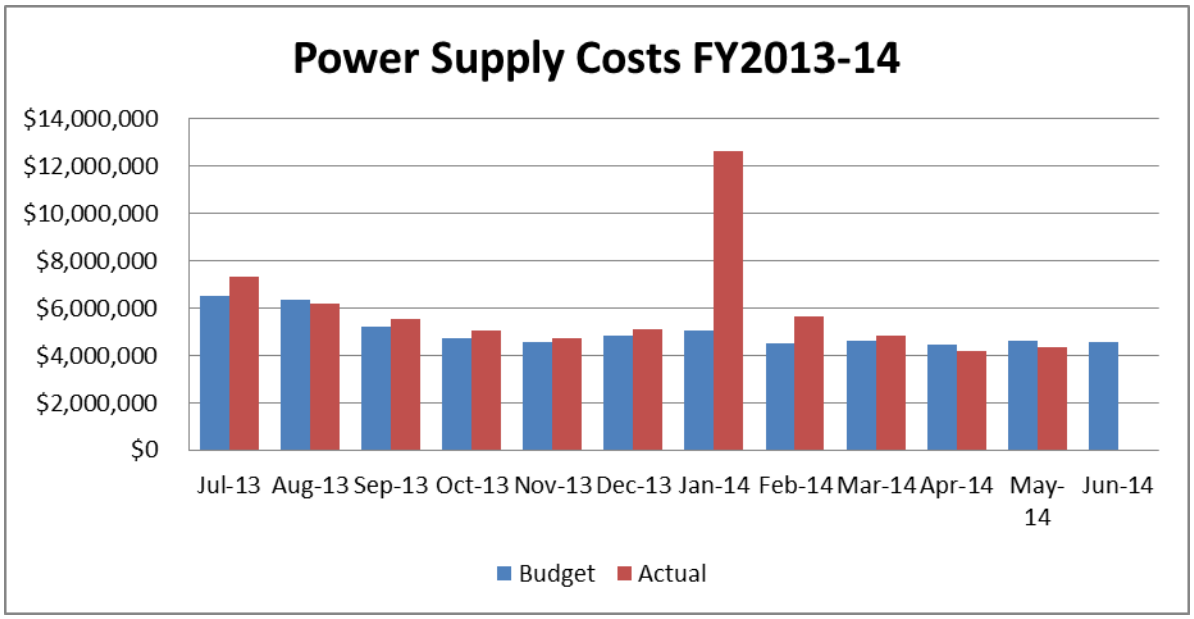
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# I. Executive Summary

## A. Power Supply Summary:




Overall Power Supply costs were $296,294 under budget due to lower hedge prices and a prior month adjustment which lowered energy costs.

Dover's budgeted cost for all power supply (capacity AND energy) was $78.90/MWh. The actual cost of all power supply (capacity AND energy) was $76.11/MWh.

The cost of energy alone was $41.86/MWh, versus a budgeted energy cost of $46.64.

Dover's hedge purchases totaled 43,920 MWh, which was 77% of the actual load. The budgeted hedge purchase totaled 26,640, which was 45% of the budgeted load.

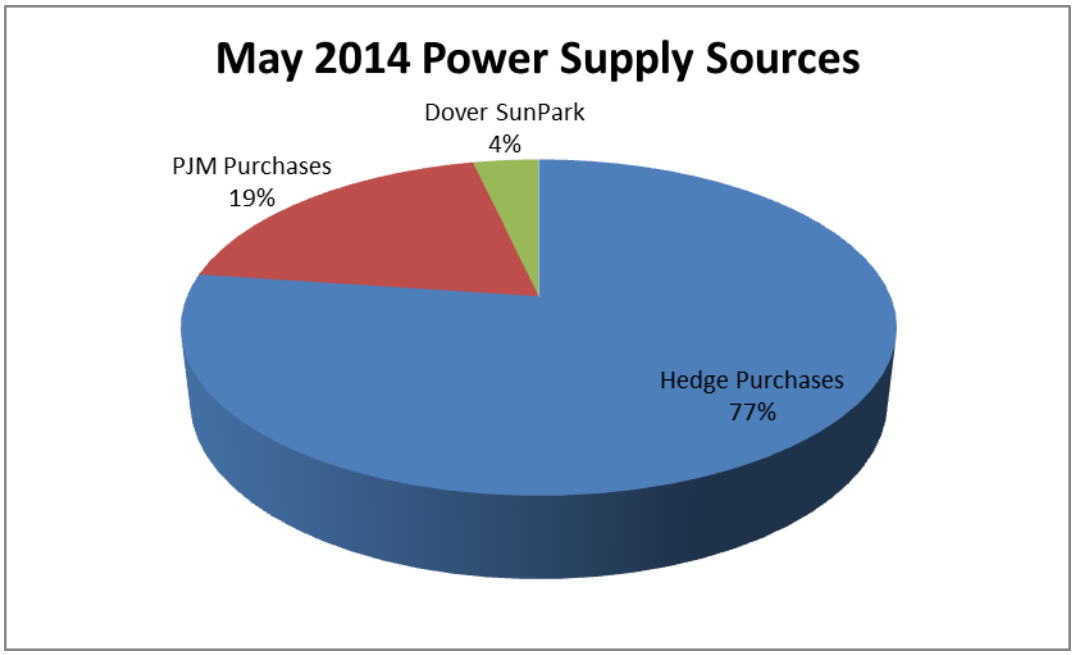
Dover's power purchases from hedge transactions totaled $2,063,766. Purchases from PJM (energy and fees) totaled $110,782. This number was lower than expected due to a prior month credit received for $242,241..

Dover's total load was 56,893 MWh versus a forecasted load of 58,638 MWh.

Dover's planned energy purchase from the SunPark solar installation was 1,927 MWh. Dover's actual energy purchase from the SunPark installation was 2,021 MWh.

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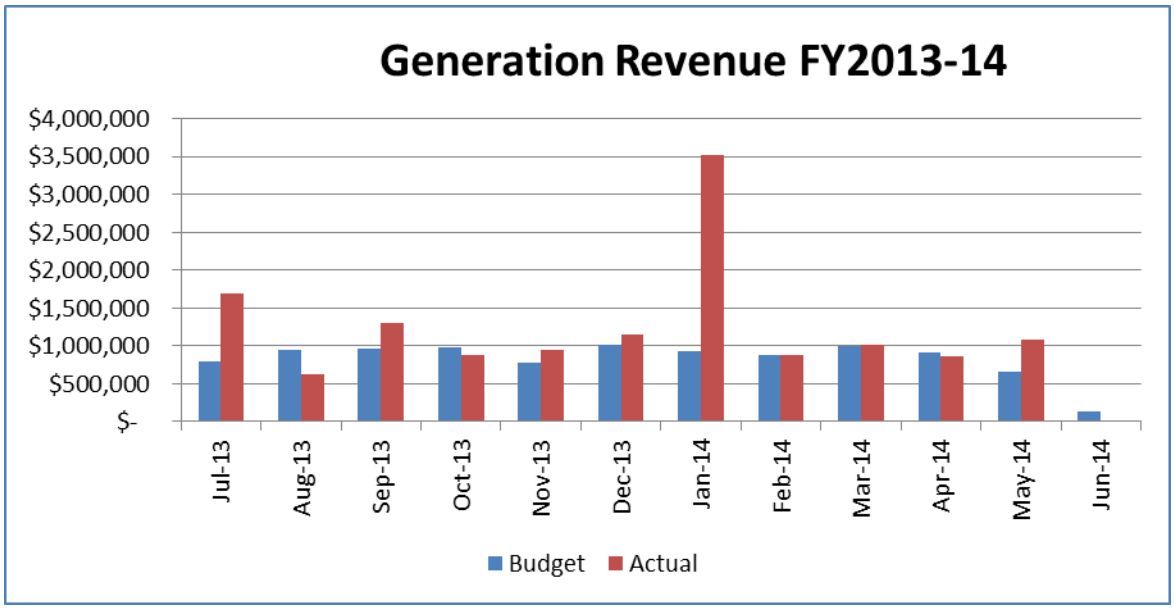
## Supply Source Summary:




## Supply Variance:

| | Budget | Actual | Variance |
|---|---|---|---|
| **Gross Load** | 58,638 | 56,893 | 1,745 |
| **Wholesale Load** | 56,711 | 54,873 | 1,838 |
| **Hedged Volume (MWh)** | 26,640 | 43,920 | (17,280) |
| **Unhedged Volume (MWh)** | 30,071 | 10,953 | 19,118 |
| **Dover SunPark Volume (MWh)** | 1,927 | 2,021 | (94) |
| **Renewable Energy Credits Volume** | 289 | 299 | (10) |
| **Hedged Cost ($/MWh)** | $ 55.32 | $ 46.99 | $ 8.33 |
| **Unhedged Energy Cost ($/MWh)** | $ 36.37 | $ 10.11 | $ 26.26 |
| **Solar Energy Cost ($/MWh)** | $ 87.03 | $ 102.42 | $ (15.39) |
| **Energy Costs ($/MWh)** | **$46.64** | **$41.86** | **$4.79** |
| **All-in Costs - Energy, Capacity and RECs ($/MWh)** | **$78.90** | **$76.11** | **$2.79** |

## B. Generation Summary:




Dover generated 1225 MWh in the month. Net generation revenue was $1,086,314 vs. a budget of $625,541.

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**Generation Breakdown:**

# City of Dover

## Monthly Wholesale Generation

May-14

Net Generation
**1225.27**

### All In Generation

| | | | |
|---|---|---|---|
| PJM - Generation | | | |
| | Economic and Reliability Dispatch | $ | 100,737.59 |
| | Generation Capacity Credit | $ | 1,329,125.00 |
| | Black Start and Transmission Losses | $ | 48,583.20 |
| Natural Gas & Oil Consumption | | | |
| | Purchases for Generation | $ | (64,691.00) |
| | Natural Gas Transport | $ | (10,077.95) |
| | Eastern Shore Cashout | $ | (27.80) |
| | Oil Consumption | $ | - |

### Production Margin

| | | | |
|---|---|---|---|
| PJM - Generation | | | |
| | Economic and Reliability Dispatch | $ | 100,737.59 |
| Natural Gas & Oil Consumption | | | |
| | Purchases for Generation | $ | (64,691.00) |
| | Natural Gas Transport | $ | (10,077.95) |
| | Eastern Shore Cashout | $ | (27.80) |
| | Oil Consumption | $ | - |
| Gross Production Margin | | $ | 25,940.84 |
| $/MWh Generation Production Gross Margin | | $ | 21.17 |

## C. Emissions Summary:

**Emissions Allowance Summary through May 31st, 2014**

McKee Run3 did operate during the month of May for testing, so there were additional emissions during this period.

| CAIR EMISSION ALLOWANCE SUMMARY | | | | |
|---|---|---|---|---|
| **Date** | **Action** | **$SO_2$ Allowances** | **$NO_x$ Allowances[1]** | |
| | | | **Seasonal** | **Annual** |
| 1/1/09 | 2008 Carryover | 3,240 | 0 | 0 |
| 1/1/09 | 2009 Allocation | 2,723 | 53 | 80 |
| 2/1/10 | 2010 Allocation | 2,039 | 50 | 78 |
| 1/1/11 | 2011 Allocation | 1,988 | 49 | 78 |
| 4/1/11 | 2011 Reallocation | | 2 | 4 |
| 1/11/12 | 2012 Allocation | 1,988 | 51 | 80 |
| 10/4/2012 | 2013 Allocation | 1,988 | 49 | 76 |
| | 2014 Allocation | 1,988 | 49 | 76 |
| 9/29/09 | $SO_2$ Sales | (1,500) | | |
| 11/12/09 | $NO_x$ Ann. Sales | | | (45) |
| 11/13/09 | $SO_2$ Sales | (1,410) | | |
| 11/20/09 | $NO_x$ Seas. Sales | | (25) | |
| 12/31/09 | 2009 Emissions[2] | (1) | (6) | (13) |
| 12/31/10 | 2010 Emissions | 0 | (54) | (54) |
| 10/31/10 | EPA Linearity Testing Req. | | (68) | (68) |
| 2011 | 2010 Deficit $NO_x$ Purchases | | 53 | 22 |
| Aug 2011 | Revised 2010 ECMPS data | | 30 | 30 |
| Nov 2011 | $NO_x$ Seas. Sales (DEMEC) | | (1) | |
| 12/31/11 | 2011 Emissions[2] | (1) | (32) | (36) |
| 12/31/12 | 2012 Emissions[2] | (1) | (37) | (37) |
| Nov 2012 | $NO_x$ Seas. Sales (DEMEC) | | (2) | |
| 2/13/2013 | $NO_x$ Annual. Sales (DEMEC) | | | (3) |
| 11/15/13 | $NO_x$ Annual Sales (DEMEC) | | (5) | |
| 12/31/13 | C.Y.T.D. 2013 Emissions | (0) | (20) | (20) |
| **5/31/14** | **2014 YTD Emissions** | **(1)** | **3** | **(11)** |
| **REMAINING ALLOWANCES** | | **13,040** | **97** | **238** |

On August 21, 2012, a three-judge panel of the U.S. District Court of Appeals (DCA) in Washington vacated EPA's Cross State Air Pollution Rule (CSAPR) which would have become effective on January 1, 2012. The DCA instructed EPA to continue

[1] Per CAIR, starting in 2009, NOx emissions are governed by a seasonal and annual program.
[2] Under CAIR, pre-CAIR SO2 allowances are retired at a rate of 2 allowances for each ton emitted. It is assumed that pre-CAIR allowances will be retired before CAIR allowances.

administering the Clean Air Interstate Rule (CAIR). EPA appealed the DCA ruling to the U.S. Supreme Court, which heard arguments on December 10th, 2013.

On April 29th, 2014, the U.S. Supreme Court overturned the DCA opinion; however it did not immediately reinstate CSAPR. It sent the rule back to the DCA for further action consistent with the Supreme Court's opinion. EPA will continue to administer CAIR until the DCA takes action and EPA is able to respond.

Market liquidity for CAIR allowances continues to be low, with few transactions occurring. The following table shows estimated values for Dover's banked allowances, based on settlement prices on the Intercontinental Exchange (ICE).

| Mark-to-Market for CAIR Allowances | | | |
|---|---|---|---|
| **Commodity** | **$/Ton ICE Settlement as of June 24, 2014** | **Tons** | **Extended Value** |
| $SO_2$ Allowances (2009 & earlier) | $ 1.35 | 5,089 | $ 6,870 |
| $SO_2$ Allowances (2010-13) | $ 0.85 | 7,951 | 6,758 |
| $NO_x$ Allowances - Seasonal | $25.00 | 97 | 2,425 |
| $NO_x$ Allowances - Annual | $65.00 | 238 | 12,826 |
| **TOTAL** | | | **$28,879** |

## Regional Greenhouse Gas Initiative, Pending Federal Regulations

The State of Delaware is a participant in the Regional Greenhouse Gas Initiative (RGGI). The City of Dover must comply with RGGI by surrendering carbon dioxide ($CO_2$) allowances pursuant to the State of Delaware's laws (Title 7, Chapter 60, Sub-Title II-A). Delaware has elected a combined emissions allowance allocation/auction mechanism for RGGI, in which 40% of $CO_2$ allowances were allocated to sources for 2009, declining by 8% per year so that by 2014, all $CO_2$ allowances are auctioned.

Dover had more than a sufficient number of RGGI allowances allocated to it to cover its requirements through the first compliance period (calendar years 2009-2011). Any unused allowances are carried over ("banked") for subsequent years. The table below shows RGGI allowance allocations, deductions and the cumulative balance by year (column 8).

| CO2 Allowance Summary (2/28/2014) | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| $CO_2$ Allowance Vintage | $CO_2$ Allowances Sold YTD | $CO_2$ Allowances (Per Facility, Prior to Sale) | | Allocated $CO_2$ Allowances | $CO_2$ Tons Emitted | Annual $CO_2$ Allowance Balance | Cumulative Balance |
| | | ***McKee Run*** | ***VanSant*** | | | | |
| 2009 | 0 | 60,128 | 2,056 | 62,184 | (5,796) | 56,388 | 56,388 |
| 2010 | 0 | 48,102 | 1,645 | 49,747 | (32,971) | 16,776 | 73,164 |
| 2011 | 0 | 36,077 | 1,234 | 37,311 | (17,763) | 19,548 | 92,712 |
| 2012 | 0 | 27,058 | 925 | 27,983 | ( 15,265) | 11,793 | 104,505 |
| 2013 | 0 | 15,032 | 514 | 24,818[3] | (10,231) | 16,091 | **119,091** |
| 2014 | 0 | -0- | -0- | -0- | (6,283) | | **112,809** |

Dover no longer receives allocations of RGGI allowances. The Cumulative Balance (column 8) – aka "Banked Allowances") can be utilized for generation in 2014 and future years. Once the banked allowances have been fully utilized, Dover will be required to purchase RGGI allowances through the auctions or through over-the-counter markets. Assuming that Dover does not sell any banked allowances, it will be able to maintain a positive balance through 2016–2025, depending on actual annual energy production in 2012 and beyond.

On February 7, 2013, RGGI proposed changes to its Model Rule. The Delaware Department of Natural Resources published the final rule on December 1, 2013 the Delaware Register of Regulations with an effective date of December 11, 2013[4]. The new RGGI rule includes a provision which eliminates some portion of banked allowances in future years.

Dover could elect to sell all or a portion of its banked allowances now and re-acquire allowances at a later date; however TEA is currently of the opinion that Dover will be better off retaining its banked allowances for use during future compliance years.

The most recent RGGI auction occurred on June 4, 2014; the auction cleared at $5.02/ton. The next auction will occur on June 4th, 2014. RGGI futures settlement prices posted on Intercontinental Exchange (ICE) on June 24, 2014 ranged from $4.95 to $5.26/ton, depending settlement month and vintage. **Based on the June 4, 2014 ICE for**

[3] Includes Q3 2013 allocations of 7,846,757 for McKee Run and 1,424,677 for VanSant.
[4] http://regulations.delaware.gov/register/december2013/final/17%20DE%20Reg%20644%2012-01-13.pdf

**July, 2014, Vintage 2013 ($4.96/ton), the value of Dover's existing 112,809 ton RGGI allowance bank is $559,533**

## Renewable Energy Certificates

Dover owns two photovoltaic systems totaling 15 kW, consisting of (one 5 kW unit at the Utilities Administration Building and two 5 kW units at the McKee Run generating station. Dover also receives solar energy produced by the 10 MW Dover Sun Park which is owned by White Oak Solar Energy, LLC. In addition to the all of the physical energy produced by the Sun Park, Dover receives 15% of Sun Park's SRECS. Through the end of February 2014, Dover has accumulated a total of 7,004 SRECS from these renewable energy resources.

While Delaware does periodically hold auctions for SRECs, these auctions are for size tiers N1 – N3, E1 and E2. The Dover Sun Park is in the N4 tier for very large facilities. State-wide carve outs for Tier 4 has been fully subscribed, so there is not a market for tier 4 SRECs in Delaware.

The nearest viable market for Dover's SRECs is Pennsylvania. Pennsylvania's April 15, 2014 SREC auction cleared separately for 2012/2013 through 2013/2014 vintage allowances. Clearing prices and Dover's SREC market value estimate are shown in the table below.

| SREC Vintage (June 1 – May 31) | Auction Clearing Price | SREC Quantity | Market Value |
|---|---|---|---|
| 2010/2011 | $ 0 (Aug-13 Auction) | 13 | $ 0 |
| 2011/2012 | $ 40.01 (Jan 2014 Auction) | 2,375 | 95,024 |
| 2012/2013 | $40.00 (April 2014 Auction) | 2,725 | 109,000 |
| 2013/2014 | $51.00 (April 2014 Auction) | 2,397 | 122,247 |
| **TOTAL** | | **7,510** | **$326,271** |

TEA continues to recommend to Dover to retain these allowances for compliance with its Renewable Portfolio Standard which DEMEC is working on. Once Dover has an approved RPS in place, it may be required to retire a portion of its current SREC balance for compliance in the 2012/13 future compliance year. Any remaining SRECs could be used for the 2013/14 compliance year.

NOTE: SRECs in both Delaware and Pennsylvania expire without value after 3 years. Dover currently has thirteen (13) 2010/2011. Based on a discussion with DEMEC staff, this expiration provision is not likely to be of concern within the current compliance year. The 2011/12 vintage allowances will be the next to expire with zero market value.

If Dover has not accumulated adequate non-solar RECs, it will need to acquire some from DEMEC for the 2013/2014 compliance year. DEMEC has told TEA that it will likely have sufficient non-solar RECs for Dover's requirements. Dover can purchase and retire a portion of these non-solar RECs during the current compliance and fiscal years, or it can defer acquisition until the June – August, 2014 time frame, after the exact amount of non-solar REC requirements is known.

## D. Operations Management Summary:

During the month of May there were no reportable or lost time accidents or injuries. The facility has now gone 1,322 days without an OSHA recordable accident and 1,322 consecutive days without a lost time reportable accident. There were zero Environmental Notices of Violations issued. On May 28 a permit deviation occurred during the water wash of the VanSant Unit compressor section . The spring outages were cleared on all units on May 30. Unit 3 was test operated four(4) times after all turbine repairs were completed in order to balance the turbine rotor. In the month of May there were no units dispatched by PJM.

Monthly Budget Variance – The actual expenses attributable to O&M of the two sites for the month of May were $317,335 against a budgeted amount of $707,984 for a favorable variance of $390,649 or 55.18%. The principal reasons for the favorable variance were due to having two(2) payroll periods expensed rather than the three (3) that were budgeted, and the timing of expenses budgeted in May but expensed earlier in the year.

## E. Risk Management Summary:

Forward power prices in PJM are lower than last month.

The current projected cost of service is below:

| PY | Hedge Ratio | Blended Cost ($/MWh) | Monthly Change ($/MWh) |
|---|---|---|---|
| 2014-15 | 70% | $ 46.26 | $ (0.32) |
| 2015-16 | 56% | $ 43.29 | $ (0.63) |
| 2016-17 | 21% | $ 43.25 | $ (0.31) |
| 2017-18 | 12% | $ 43.97 | $ (1.40) |
| 2018-19 | 0% | $ 45.59 | $ - |

# II. Budget Report

## Variance Report:

| | Budget May-14 | Actual May-14 | Variance |
|---|---|---|---|
| | | | |
| **Gross Load** | **58,638** | **56,893** | **1,745** |
| | | | |
| **Power Supply** | | | |
| Hedged Energy | $1,473,726 | $2,063,766 | ($590,040) |
| PJM - Energy, Congestion & Losses | $1,093,709 | 110,738 | $982,971 |
| PJM - ARR, Transmission and Fees | $395,000 | 463,292 | ($68,292) |
| Dover SUN Park Energy | $167,713 | $206,943 | ($39,230) |
| Dover SUN Park RECs | $25,000 | $42,751 | ($17,751) |
| Management Fees | $83,000 | $83,000 | $0 |
| PJM - Capacity UCAP Obligated Purchased | $1,388,224 | $ 1,359,588.08 | $ 28,636 |
| **Subtotal - Power Supply** | **$4,626,372** | **$4,330,078** | **$296,294** |
| | | | |
| **Power Generation O&M** | | | |
| Plant O&M | $ 707,164 | $ 317,335 | $ 389,829 |
| | | | |
| **Subtotal Generation O&M** | **$707,164** | **$ 317,335** | **$389,829** |
| | | | |
| **Power Generation Production Margin** | | | |
| PJM - Economic and reliability dispatch | $0 | $ (100,737.59) | $100,738 |
| Fixed Fuel and Transport Charges | $0 | $ 74,796.75 | ($74,797) |
| **Subtotal Generation Production Margin** | **$0** | **$ (25,940.84)** | **$25,941** |
| | | | |
| **Power Generation Non-Production Revenue** | | | |
| PJM - Generation Capacity Credit | ($1,329,125) | $ (1,329,125.00) | $0 |
| Emissions Allowance Sales | $0 | $ - | $0 |
| PJM - Black Start & Transmission Losses | ($30,580) | $ (48,583.20) | $18,003 |
| **Subtotal - Non-Production Revenue** | **($1,359,705)** | **($1,377,708)** | **$18,003** |
| | | | |
| **SubTotal - All Generation** | **(652,541)** | **($1,086,314)** | **$433,773** |
| | | | |
| **Total - Utilities Cost** | **$3,973,831** | **$3,243,764** | **$730,067** |
| | | | |
| Unit Costs | | | |
| Total - Power Supply | $78.90 | $76.11 | $2.79 |
| Total - Power Generation | ($11.13) | ($19.09) | $7.97 |
| Final Cost of Service to City of Dover Ratepayers | $67.77 | $57.01 | $10.75 |

## Variance Analysis:

Power Supply

- Dover consumed 1,745 MWh less than forecast for the month.
- PJM energy costs were lower than expected due to a prior month credit received in May. PJM Fees were higher than budget.
- Hedges were placed at below budget levels and he prior month adjustment offset the higher fees and solar costs. This resulted in a net power supply cost of $76.11/MWh, $2.79/MWh below budget.
- For the month, the city realized a favorable variance of $296,294 for power supply vs. the monthly budget.
- Dover Sun Park generated 94 MWh more than forecast.

Generation

- Power generation had a favorable budget variance of $433,773..
- Plant O&M expenses had a favorable budget variance of $389,829 for the month.

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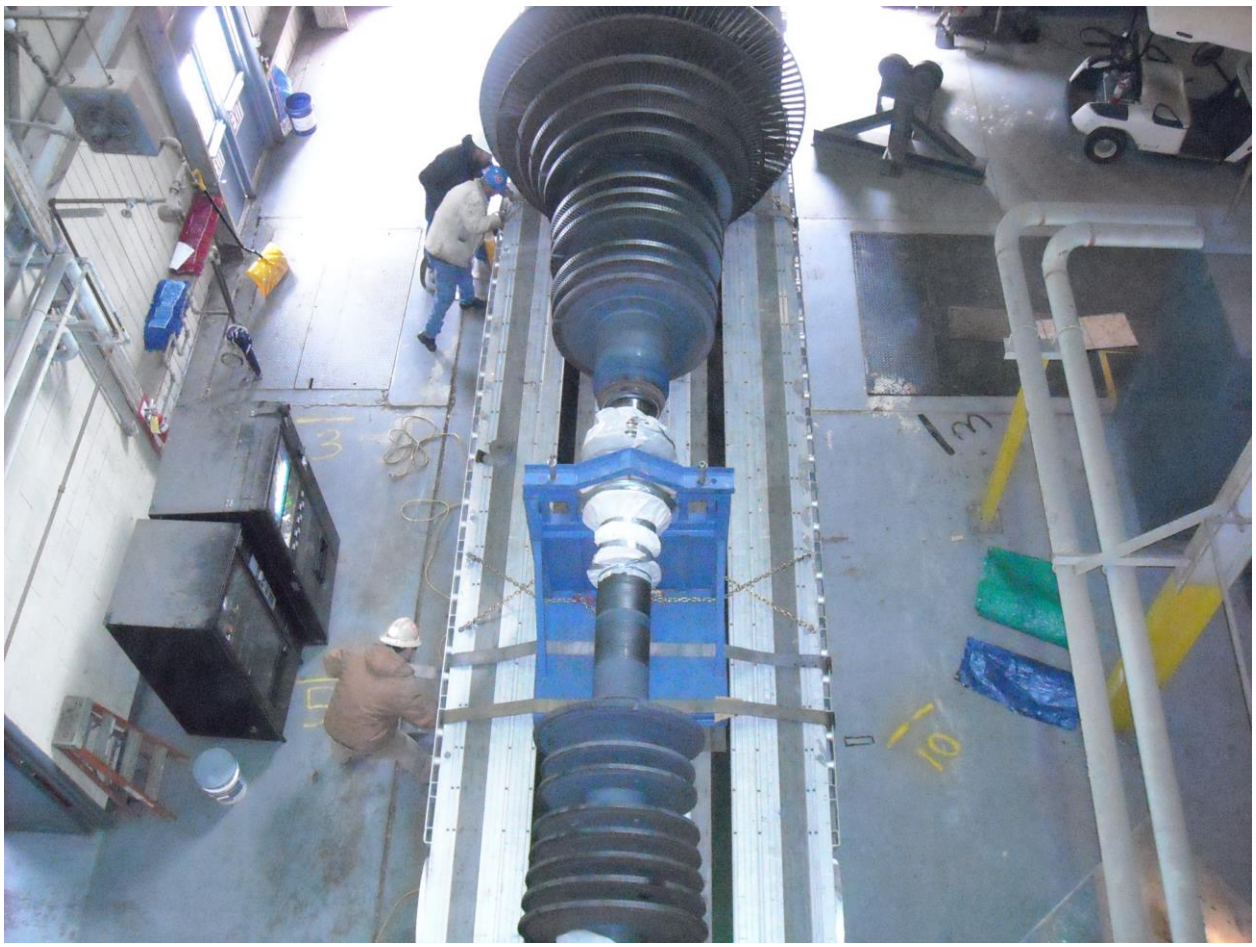
## YTD Variance Report:

| | Budget YTD | Actual YTD | Variance |
|---|---|---|---|
| | | | |
| **Gross Load** | **675,637** | **695,743** | **(20,106)** |
| | | | |
| **Power Supply** | | | |
| Hedged Energy | $22,381,070 | $26,569,813 | ($4,188,743) |
| PJM - Energy, Congestion & Losses | $11,177,245 | $14,362,349 | ($3,185,104) |
| PJM - ARR, Transmission and Fees | $4,345,000 | $7,139,891 | ($2,794,891) |
| Dover SUN Park Energy | $1,363,187 | $1,587,484 | ($224,298) |
| Dover SUN Park RECs | $275,000 | $337,827 | ($62,827) |
| Management Fees | $913,000 | $913,000 | $0 |
| PJM - Capacity UCAP Obligated Purchased | $15,001,773 | $14,721,538 | $280,235 |
| **Subtotal - Power Supply** | **$55,456,274** | **$65,631,903** | **($10,175,629)** |
| | | | |
| **Power Generation O&M** | | | |
| Plant O&M | $5,126,069 | $4,768,851 | $357,218 |
| | | | |
| **Subtotal Generation O&M** | **$5,126,069** | **$4,768,851** | **$357,218** |
| | | | |
| **Power Generation Production Margin** | | | |
| PJM - Economic and reliability dispatch | ($230,472) | ($5,332,177) | $5,101,706 |
| Fixed Fuel and Transport Charges | $0 | $2,124,400 | ($2,124,400) |
| **Subtotal Generation Production Margin** | **($230,472)** | **($3,207,777)** | **$2,977,306** |
| | | | |
| **Power Generation Non-Production Revenue** | | | |
| PJM - Generation Capacity Credit | ($14,363,125) | ($14,363,125) | $0 |
| Emissions Allowance Sales | $0 | $0 | $0 |
| PJM - Black Start & Transmission Losses | ($366,380) | ($1,111,094) | $744,714 |
| **Subtotal - Non-Production Revenue** | **($14,729,505)** | **($15,474,219)** | **$744,714** |
| | | | |
| **SubTotal - All Generation** | **($9,833,908)** | **($13,913,145)** | **$4,079,237** |
| | | | |
| **Total - Utilities Cost** | **$45,622,367** | **$51,718,758** | **($6,096,391)** |
| | | | |
| Unit Costs | | | |
| Total - Power Supply | $82.08 | $94.33 | ($12.25) |
| Total - Power Generation | ($14.56) | ($20.00) | $5.44 |
| Final Cost of Service to City of Dover Ratepayers | $67.52 | $74.34 | ($6.81) |

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**Operations Management**

# NAES Corporation
# Dover, Delaware
# May 2014
# Monthly Report



**Unit 3 Turbine Rotor after Inspection, Repairs and Balancing**

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## 1.0 Environmental, Health and Safety:

During the month of May, there were no restricted work days or lost time accidents. The facility has now gone 3 years and 227 days (1,322 days) through May 2014 without an OSHA Recordable Accident or a Lost Time reportable accident. There was one employee who twisted his ankle during a routine inspection and is being treated as a First Aid case.

The plant received no Notice of Violations (NOVs) during the month. The May DMR was submitted for the McKee Run site with no NPDES exceedences. On May28, 2014 a permit deviation occurred during a waterwash on the VanSant compressor section of the combustion turbine. The moisture carry over (water vapor) from the water caused the CEMS to record these opacity readings.

During the month of May, there were eight IWW discharges to the Kent County Sewer. Sampling occurred on May 8, 2014 and laboratory analytical data indicated no exceedences. The May SIU Report was submitted to Kent County. On May 8, 2014, Eldredge Oil removed 110 gallons of used oil and 475 gallons of oily water. In preparation for a lab pack of obsolete Laboratory chemicals, notification forms were submitted to DNREC for McKee Run and VanSant to temporarily go from a Conditional Exempt Small Quantity Generator to a Large Quantity Generator.

| Environmental, Health, and Safety Statistics | | |
|---|---|---|
| | Month (May) | Fiscal Year to Date (7/1/13-6/30/14) |
| NOVs | 0 | 0 |
| Opacity Deviations | 1 | 11 |
| Environmental Deviations | 0 | 0 |
| OSHA Recordable | 0 | 0 |
| OSHA LTA's | 0 | 0 |
| First Aid cases | 1 | 1 |
| Restricted Workday Accident | 0 | 0 |
| Near Miss | 0 | 2 |
| Man Hours Worked | 4,560.5 | 48,303.50 |
| Date last OSHA Recordable | | 10/14/10 |
| Date last Lost Time Accident | | 10/14/10 |
| Days since last OSHA recordable | | 1,322 |
| Days since last Lost Time Accident | | 1,322 |

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## Emissions ($NO_x$, $CO_2$ & $SO_2$) All data thru 5/31/14

| NOx Summary – Ozone Season (May-Sep) Tons | | | | | |
|---|---|---|---|---|---|
| *Year* | *Unit #1* | *Unit #2* | *Unit #3* | *Unit #11* | *TOTAL* |
| 2011 | 1.8 | 1.5 | 31.4 | 1.4 | 36.1 |
| 2012 | 1.2 | 1.0 | 35.8 | 1.0 | 33.1 |
| 2013 | 1.1 | 1.7 | 19.3 | 1.3 | 23.4 |
| 2014 | 0.0 | 0.0 | 2.1 | 0.0 | 2.1 |
| **NOx Summary - Year (Jan-Dec) Tons** | | | | | |
| *Year* | *Unit #1* | *Unit #2* | *Unit #3* | *Unit #11* | *TOTAL* |
| 2011 | 1.8 | 1.5 | 32.6 | 2.9 | 38.8 |
| 2012 | 1.2 | 1.1 | 35.8 | 1.0 | 36.9 |
| 2013 | 1.1 | 1.7 | 19.4 | 1.3 | 23.5 |
| 2014 | 0.5 | 0.7 | 9.0 | 3.1 | 13.3 |
| **$SO_2$ Summary - Year (Jan-Dec) Tons** | | | | | |
| *Year* | *Unit #1* | *Unit #2* | *Unit #3* | *Unit #11* | *TOTAL* |
| 2011 | 0.0 | 0.0 | 0.1 | 0.5 | 0.6 |
| 2012 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 2013 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 2014 | 0.0 | 0.0 | 0.4 | 0.6 | 1.0 |

## CAIR NOx Allowances Summary*

| CAIR NOx Allowance Vintage | CAIR NOx Allowances Sold YTD | NOx Allowances Available (Per Facility, Prior to Sale) | | Total NOx Tons Emitted (Yr/ Season) McKee Run - VanSant | CAIR NOx Allowances Purchased YTD | NOx Allowance Balance | |
|---|---|---|---|---|---|---|---|
| | | *McKee Run (Yr/Season)* | *VanSant (Yr/Season)* | | | *McKee Run (Yr/Season)* | *VanSant (Yr/Season)* |
| 2010 and earlier | 3*** | | | | | 27/0 | 0/2 |
| 2011 | 0 | 77/48 | 5/3 | 33/31– 3/1 | 0/0 - 0/0 | 42/10 | 2/2 |
| 2012 | 2** | 75/46 | 5/3 | 36/36 – 1/1 | 0/0 - 0/0 | 39/10 | 2/0 |
| 2013 | 5** | 77/48 | 5/3 | 19/19 – 1/1 | 0/0 - 0/0 | 58/24 | 4/2 |
| 2014 | 0 | 71/46 | 5/3 | 9/2 - 3/0 | 0/0 – 0/0 | 62/44 | 2/3 |
| | | | | **Total NOx Allowance Balance** | | **228/88** | **10/9** |

***Note – Emissions allowances are deducted according to oldest vintage first or unless otherwise directed.**
****Note – The facility transferred Ozone Season allowances to a third party.**

## $SO_2$ 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* | | |
| **2010 and earlier** | 0 | 4815 | 276 | 0 | 5089 |
| **2011** | 0 | 1850 | 138 | 1 | 1988* |
| **2012** | 0 | 1850 | 138 | 1 | 1988* |
| **2013** | 0 | 1850 | 138 | 0 | 1988* |
| **2014** | 0 | 1850 | 138 | 1 | 1987 |

| | | |
|---|---|---|
| | **Total SO2 Allowance Balance** | **13,041** |
| ***Note – Emissions allowances are deducted according to oldest vintage first, unless otherwise directed.** | | |

| **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 | 60,128 | 2,056 | 5,796 | 56,388 |
| 2010 | 0 | 48,102 | 1,645 | 32,971 | 16,776 |
| 2011 | 0 | 36,077 | 1,234 | 17,763 | 19,548 |
| 2012 | 0 | 27,058 | 925 | 15,265 | 11,793 |
| 2013 | 0 | 22,879# | 1,939# | 10,231 | 14,587 |
| 2014 | 0 | 0 | 0 | 6,283 | (6,283) |
| | | | **Total CO2 Allowance Balance** | | **112,809** |

***Note: CO2 allowance values are provided by the RGGI CO2 Allowance Tracking System.**
**Note: All emissions (NOx, SO2 and CO2) totals for 2013 are unofficial.**
**#Note: Additional CO2 Emission Values were added to 2013 balances by RGGI COATS- 7,846.757 for McKee Run and 1,424.677 for VanSant**

## 2.0 Financial

**Financial – Current Month**

| Month – May | | | |
|---|---|---|---|
| | Actual | Budget | Variance |
| Personnel | 253,600 | 449,510 | 195,910 |
| Materials & Supplies | 7,028 | 19,135 | 12,107 |
| Administrative Expenses | 56,707 | 239,339 | 182,632 |
| Total | **$317,335** | **$707,984** | **$390,649** |

**Financial – Fiscal Year to Date**

| Number of Months – 11 | | | |
|---|---|---|---|
| | Actual | Budget | Variance |
| Personnel | 2,722,814 | 3,156,720 | 433,906 |
| Materials & Supplies | 171,870 | 215,410 | 43,540 |
| Administrative Expenses | 1,694,203 | 1,754,139 | 59,936 |
| Total | **$4,588,887** | **$5,126,269** | **$537,382** |

## 2.1 Variance analysis:

The actual expenses for the month of May are $317,335 against a budgeted amount of $707,984 for a favorable variance of $390,649 or 55.18%. The variance was due to the following:

**PERSONNEL EXPENSES** – A favorable monthly variance of $195,910 was due to having only two (2) payroll periods expensed versus the three (3) that were budgeted for May. As a result, this impacted three labor accounts – straight time, overtime, and labor burdens. It is expected that three (3) payrolls will be expensed in June thereby creating an unfavorable variance for the month of June.

**MATERIALS AND SUPPLIES EXPENSES**- A favorable monthly variance of $12,107 was due to the timing of the water – sewer invoices. There were two (2) months invoiced during the billing period for April. In addition, there were budgeted roof repairs that were not completed in May due to scheduling conflicts and inclement weather.

**ADMINISTRATIVE EXPENSES** – A favorable monthly variance of $182,632 due to the timing of electricity monthly invoices and early completion and invoicing for: the FAC-HEP inspections; Appendix E emissions testing (Units 2 and 11); air compressor maintenance kits that were originally budgeted in May.

The forecasted expenses for this fiscal year are $5,781,740 expensed versus an approved budget of $6,015,800 thereby realizing a 96.11% expenditure rate.

## 3.0 Operations

**Unit Operations / Outages / Trips:** The spring outage for all units was cleared on May 30 at 0700 hours. Unit 3 was operated for testing four (4) times in the month of May to try to balance the turbine generator after repairs had been made to the unit during the overhaul. A waterwash of the compressor section on Unit 11 was performed on May 28 in preparation of the summer run season.

| Month May 2014 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 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 | 0.0 | 25.082 | 25.082 | 0.0 | 25.082 |
| Starts | # | 0 | 0 | 4 | 4 | 0 | 4 |
| Gross Generation | MWh | 0.0 | 0.0 | 1,353.089 | 1,353.089 | 0.0 | 1,353.089 |
| Net Generation | MWh | 0.0 | 0.0 | 1,234.234 | 1,234.234 | 0.0 | 1,234.234 |
| Total Auxiliaries | MWh | 0.0 | 0.0 | 358.613 | 358.613 | 0.0 | 358.613 |
| Auxiliaries purchased | MWh | 16.506 | 16.506 | 239.758 | 272.769 | 1.883 | 274.652 |
| Fuel Gas Used | MMBTU | 0.0 | 0.0 | 15,920.717 | 15,920.717 | 97.336 | 16,018.053 |
| Fuel Oil Used | MMBTU | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Fuel Oil Used | Gallons | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Fuel | MMBTU | 0.0 | 0.0 | 15,920.717 | 15,920.717 | 97.336 | 16,018.053 |
| Net Heat Rate | BTU/KWh | 0.0 | 0.0 | 12.899 | 12.899 | 0.0 | 12.899 |
| Unit Trips | # | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Capacity Factor | % | 0.0 | 0.0 | 1.63 | 1.22 | 0.00 | 0.96 |
| Availability Factor | % | 5.51 | 5.51 | 8.88 | 6.63 | 5.51 | 6.35 |
| Commercial Unavailability (CU) | % | 0 | 0 | 0 | 0 | 0 | 0 |
| Planned Outage Hours | Hours | 703.00 | 703.00 | 703.00 | 2,109.00 | 703.00 | 2,812.00 |
| Maintenance Outage Hours | Hours | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Forced Outage Hours | Hours | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Reserve Shutdown Hours | Hours | 41.000 | 41.000 | 41.000 | 123.000 | 41.000 | 164.000 |
| HW Boiler Gas Usage | MMBTU | | | | 0.0 | | 0.0 |
| Pilot Gas Usage | MMBTU | 0.0 | 0.0 | | 0.0 | | 0.0 |

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

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| 2013-2014 Fiscal Year-to-Date - May | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 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 | 135.697 | 214.032 | 312.855 | 662.584 | 75.655 | 738.239 |
| Starts | # | 7 | 7 | 24 | 38 | 20 | 58 |
| Gross Generation | MWh | 959.877 | 1,413.560 | 18,928.674 | 21,302.111 | 2,615.094 | 23,917.205 |
| Net Generation | MWh | 895.980 | 1,309.804 | 17,319.621 | 19,525.405 | 2,613.006 | 22,138.411 |
| Total Auxiliaries | MWh | 375.053 | 480.010 | 3,672.486 | 4,527.549 | 42.850 | 4,570.399 |
| Auxiliaries purchased | MWh | 353.779 | 396.309 | 2,063.877 | 2,813.965 | 40.033 | 2,853.998 |
| Fuel Gas Used | MMBTU | 8,924.901 | 15,004.575 | 176,486.689 | 200,416.165 | 19,682.155 | 220,098.320 |
| Fuel Oil Used | MMBTU | 5,504.840 | 4,463.354 | 36,178.243 | 46,146.437 | 15,380.547 | 61,526.984 |
| Fuel Oil Used | Gallons | 38,567 | 31,228 | 252,473 | 322,268 | 108,053 | 430,321 |
| Total Fuel | MMBTU | 14,429.741 | 19,467.929 | 212,664.932 | 246.562.602 | 35,062.702 | 281,625.304 |
| Net Heat Rate | BTU/KWh | 15.641 | 14.141 | 12.899 | 14.227 | 13.198 | 13.913 |
| Unit Trips | # | 1 | 1 | 0 | 2 | 5 | 7 |
| Capacity Factor | % | 0.66 | 0.96 | 2.11 | 1.79 | 0.83 | 1.57 |
| Availability Factor | % | 55.72 | 56.72 | 56.72 | 56.38 | 56.72 | 56.47 |
| Commercial Unavailability (CU) | % | 0.95 | 0.04 | 0.01 | 0.13 | 0.0 | 0.10 |
| Planned Outage Hours | Hours | 3,480.00 | 3,480.00 | 3,480.00 | 10,440.00 | 3,480.00 | 13,920.00 |
| Maintenance Outage Hours | Hours | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Forced Outage Hours | Hours | 80.000 | 0.0 | 0.0 | 80.000 | 0.0 | 80.000 |
| Reserve Shutdown Hours | Hours | 4,344.303 | 4,309.968 | 4,299.555 | 12,953.826 | 4,484.345 | 17,438.171 |
| HW Boiler Gas Usage | MMBTU | | | | 6,203.127 | | 6,203.127 |
| Pilot Gas Usage | MMBTU | 2,375.134 | 4,694.627 | | 7,069.761 | | 7,069.761 |

| Fuel Oil Inventory | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monthly Inventory (Start) | Monthly Inventory (End) | Fuel Purchases (Month) | Monthly Inventory (Change) | FY 13-14 Inventory (Start) | Fuel Purchases (FYTD) | FY 13-14 Inventory (Change) |
| McKee Run (#2 Fuel Oil) | 462,656 | 464,419 | 0 | 1,763 | 454,725 | 378,003 | 9,694 |
| VanSant (#2 Fuel Oil) | 72,814 | 73,235 | 0 | 421 | 146,133 | 35,000 | (72,898) |

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

| VanSant Lifetime through May 2014 | | | |
|---|---|---|---|
| | Actual Starts | Factored Starts | Fired Hours |
| VanSant | 1351 | 2313.75 | 4,306.80 |
| Since HGP - Dec 2004 | 258 | 646.05 | 923.22 |

## Team Report:

The Operations staff continues to support maintenance activities during the planned outage by serving as Confined Space Attendants for confined space areas as well as other support and maintenance tasks. The Operations staff has also supported the outage by performing various LOTO tasks needed to test or place equipment in or out or service.

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

**Capacity Testing – FY 2013-2014**

| **Summer 2013 (June 1- Aug 31)** | | | **Winter 2013-2014 (Dec 1- Feb 28)** | | |
|---|---|---|---|---|---|
| Unit | Rated Net Capability (MW) | Reported Net Capability (MW) | Unit | Rated Net Capability (MW) | Reported Net Capability (MW) |
| 1 | 17 | 17.2 | 1 | 17 | 17.5 |
| 2 | 17 | 17.8 | 2 | 17 | 18.2 |
| 3 | 102 | 103.0 | 3 | 102 | 104.4 |
| 11 | 39 | 40.9# | 11 | 39 | 44.05# |
| Total | 175 | 178.9 | Total | 175 | 184.1 |

**Note: * Denotes Unit is qualified for the PJM Winter Demonstration Period Exemption Program and data has been submitted into the PJM eGADS**
**Note: # Depicts Net Corrected Capacity for Ambient Air Conditions – VanSant Unit only**

## 4.0 Maintenance

During the month of May, the Plant Maintenance staff continued addressing the backlog of work orders. There were forty-eight work orders issued with sixty-one work orders being completed during the month. No safety work orders were entered into the plant's Computerized Maintenance Management System (MP2) during the month. The table below summarizes the monthly work order activities.

**Work Order Report**

**May - 2014**

| Priority # | Outstanding From Previous Month | Issued This Month | Completed This Month | Outstanding at the end of the month |
|---|---|---|---|---|
| **1** | 17 | 2 | 3 | 16 |
| **2** | 76 | 10 | 25 | 61 |
| **3** | 41 | 4 | 4 | 41 |
| **4** | 5 | 0 | 0 | 5 |
| **5** | 14 | 0 | 0 | 14 |
| **SW1** | 0 | 0 | 0 | 0 |
| **SW2** | 0 | 0 | 0 | 0 |
| **SW3** | 0 | 0 | 0 | 0 |
| **SW4** | 0 | 0 | 0 | 0 |
| **SW5** | 0 | 0 | 0 | 0 |
| **PM** | 80 | 32 | 29 | 83 |
| **EM** | 0 | 0 | 0 | 0 |
| **Totals** | 233 | 48 | 61 | 220 |

**Note: PM Work Orders are included in the priority totals**

Notable activities during the month include:

NAES IC&E & Operations Staff completed a successful waterwash on the VanSant combustion turbine. During the evolution the IC&E technicians were able to ensure that all of the calibrations that were made during the outage enabled the unit to operator properly. There were no issues with the water wash or the checking out of equipment although there was an opacity deviation when the water vapor was sensed on the Continuous Opacity Monitoring System (COMS).

NAES Maintenance Staff assisted the turbine contractor and the vibration engineer during the turbine run up testing. The staff opened up different areas of the turbine in order to install weights on the turbine in locations specified by the vibration engineer.

NAES IC&E Staff removed and replaced the plant inverter which had failed several months ago. The new inverter has more load carrying capacity that will aid in plant operations. The IC&E technicians and the OEM field engineer started the unit up and completed the startup procedures. There were no issues during the startup.

## 5.0 Capital Improvement Projects (CIP)

| Project Number | Description | Update |
|---|---|---|
| EG1402 | Unit #3 Cooling Tower Repairs | Progress: Cooling Tower decking is 100% complete. Inspection was conducted in March as a precursor for CIP work scope development next FY.<br>Schedule: Inspection work completed and work scope is being modified to reflect deficiencies found during inspection. Bids requested and bid meeting held for fill replacement. Bids on project were received and now undergoing evaluation. All bids higher than expected. |
| EG1404 | McKee Run Auxiliary Component Replacement | Progress: All work planned is now complete.<br>Schedule: Project closeout left to complete |
| EG1405 | VanSant Station Component Replacement | Progress: All work planned is now complete<br>Schedule: Project closeout left to complete |
| EG1406 | McKee Run HEP Pipe Repairs | Progress: The recently completed hanger adjustments will need to be checked with the unit in the hot (running) position. Expected June operations should provide an opportunity to do so.<br>Schedule: Planning is underway to develop work scope to change out the section of pipe scheduled for the fall of 2014. |
| EG1407 | Metering System Upgrades | Progress: Work scope is still being developed for an RFP.<br>Schedule: Work activities are moving forward. Working with vendor to finalize RFP documents for release in late June or July period. |
| EG1408 | McKee Run/VanSant Safety Compliance Items | Progress: With engineering support, work scopes are being developed for RFP(s) to be put out in July period. Will need to go out for bids once complete.<br>Schedule: Work activities are behind due to Fall and Spring Outage activities. |
| EG1409 | McKee Run Natural Gas Block-Bleed Valves | Progress: All work planned is now complete<br>Schedule: Final invoice payment and Project closeout left to complete. |
| EG1413 | McKee Run/VanSant Structural | Progress: Plant staff completed development of paint specifications and bid requests were received.<br>Schedule: Bids were received in early September. Work put on hold |

| | | |
|---|---|---|
| | Preservation | due to budget restraints. Bid updates to be requested for Fiscal 2015 installation. |
| EG1212 | Unit 3 Turbine Repairs | Progress: All work planned is now complete. Viable suppliers for the damaged rotor expansion instrumentation are still being researched. This equipment is obsolete and will be replaced with current technology. Replacement of other turbine supervisory instrumentation will also be investigated. High vibration experienced during hot starts will require an additional balancing during the upcoming fall outage.<br>Schedule: Outage cleared on May 30. We are pursuing the replacement rotor expansion instrumentation on a rush basis. |
| EG1415 | McKee Run Units #1-#2 Component Repairs | Progress: Cost to be incurred due to repairs on Unit 1 Boiler and turbine were completed in November.<br>Schedule: Other scope activities cancelled due to the announcement to stop operation of Units 1 and 2 in 2017. |
| EG1416 | VanSant Capacity Increase | Progress: Submitted permit application to DNEC in March and currently discussing possible permit limitation. Constructions Bids were returned, evaluated and a recommendation provided to TEA and to the COD. Award of bid was approved by COD City Council in May.<br>Schedule: Award of Construction vendor approved in May. Planning in progress with vendor for construction drawings and scheduling. Continuing to work with DNREC on Construction permit language and limits going forward. |

## 6.0 General Plant Information

Gary Shisler, Operator II-1, completed his probation period on May 4, 2014 and is continuing add to his plant knowledge.

### Training:

Plant employees continue with General Physics safety training and environmental courses to enhance their overall knowledge of permit and safety requirements.

Topics discussed during the monthly safety committee meeting were reviewed by the entire staff. The monthly safety topic was on “Propane Grill Safety”.

| Calendar of Events | Date |
|---|---|
| EIA-860 Report | TBD |
| EIA-923 Report | TBD |
| NPDES Permit Expires (DNREC has Extended) | March 4, 2014 (TBD) |
| Units 1, 2, and 3 Spring Outage | March 3, 2014 – May 30, 2014 |
| Unit 11 Spring Outage | March 3, 2014 – May 30, 2014 |
| Annual VanSant Black Start Test | TBD |
| NOx Ozone Season Starts | May 1, 2014 |
| PJM Summer Capacity Test Period | June 1, 2014 – August 31, 2014 |
| FY 2013-2014 Budget Year Ends | June 30, 2014 |
| Toxic Release Inventory (TRI) Annual Report | July 1, 2014 |
| Semi-Annual Title V Certification Due | July 31, 2014 |
| NOx Ozone Season Ends | September 30, 2014 |
| Units 1, 2, 3 and 11 Fall Outage | October 1, 2014 |
| Four Year Accident Free | October 14, 2014 |
| Winter Capacity Period | December 1, 2014 to February 28, 2015 |
| NOx Emissions Reconciliation Due | March 1, 2015 |
| SO2 Emissions Reconciliation Due | March 1, 2015 |
| SARA III / Tier II Report Due | March 1, 2015 |
| Air Emission Inventory | April 30, 2015 |

## 7.0 Summary of NAES Performance to Date

| Measure | Plant Performance FY 2013-2014 Month | | Year to Date | | YTD Incentive | FY Maximum Incentive |
|---|---|---|---|---|---|---|
| Commercial Unavailability (CU) | 0.0% | | 0.10% | | $91,087 | $94,882 |
| Safety | 0 | | 0 | | $17,790 | $17,790 |
| Environmental | 0 | | 0 | | $17,790 | $17,790 |
| Capacity Tests Completed | Summer | Winter | Summer | Winter | | |
| Unit 1 | No | No | Yes | Yes | $3,559 | $3,559 |
| Unit 2 | No | No | Yes | Yes | $3,559 | $3,559 |
| Unit 3 | No | No | Yes | Yes | $21,349 | $21,349 |
| Unit 11 | No | No | Yes | Yes | $7,117 | $7,117 |
| Total YTD Incentive % | 97.71% | | ***Total YTD Incentive*** | | $162,249 | $166,045 |

Note: All units successfully completed the Summer and Winter Capacity (FY 2013-2104) Testing for PJM.

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# III. Appendix 1 – PJM Invoice Breakdown

| | | Gen | Load | Grand Total |
|---|---|---|---|---|
| ⊟480-8102-592-95-49 | Capacity Resource Deficiency | | $ (4,132.92) | $ (4,132.92) |
| | Capacity Transfer Rights | | $ (19,233.33) | $ (19,233.33) |
| | Incremental Capacity Transfer Rights | | $ (1,687.33) | $ (1,687.33) |
| | Locational Reliability | | $ 1,384,641.66 | $ 1,384,641.66 |
| **480-8102-592-95-49 Total** | | | **$ 1,359,588.08** | **$ 1,359,588.08** |
| ⊟480-8102-592-95-50 | RPM Auction | $ (1,329,125.00) | | $ (1,329,125.00) |
| **480-8102-592-95-50 Total** | | **$ (1,329,125.00)** | | **$ (1,329,125.00)** |
| ⊟480-8102-592-95-90 | Auction Revenue Rights | | $ (26,678.60) | $ (26,678.60) |
| | Balancing Operating Reserve | | $ 15,649.12 | $ 15,649.12 |
| | Balancing Operating Reserve for Load Response | | $ 58.07 | $ 58.07 |
| | Black Start Service | | $ 1,859.66 | $ 1,859.66 |
| | CT Lost Opportunity Cost Allocation | | $ (17.36) | $ (17.36) |
| | Day-Ahead Load Response Charge Allocation | | $ 705.78 | $ 705.78 |
| | Day-ahead Operating Reserve | | $ 6,569.79 | $ 6,569.79 |
| | Day-ahead Operating Reserve for Load Response | | $ (787.67) | $ (787.67) |
| | Day-ahead Scheduling Reserve | | $ 7.24 | $ 7.24 |
| | Demand Resource and ILR Compliance Penalty | | $ (1,993.92) | $ (1,993.92) |
| | Expansion Cost Recovery | | $ 408.27 | $ 408.27 |
| | FERC Annual Recovery | | $ 3,914.98 | $ 3,914.98 |
| | Generation Deactivation Refund | | $ (732.02) | $ (732.02) |
| | Load Management Test Failure | | $ (44.33) | $ (44.33) |
| | Load Reconciliation for Transmission Losses | | $ 2,406.00 | $ 2,406.00 |
| | Market Monitoring Unit (MMU) Funding | | $ 228.71 | $ 228.71 |
| | Michigan - Ontario Interface Phase Angle Regulators | | $ 182.05 | $ 182.05 |
| | Network Integration Transmission Service | | $ 326,717.68 | $ 326,717.68 |
| | Non-Firm Point-to-Point Transmission Service | | $ (327.80) | $ (327.80) |
| | Non-Synchronized Reserve | | $ 1,167.67 | $ 1,167.67 |
| | North American Electric Reliability Corporation (NERC) | | $ 596.74 | $ 596.74 |
| | Organization of PJM States, Inc. (OPSI) Funding | | $ 39.05 | $ 39.05 |
| | PJM Scheduling, System Control and Dispatch Service - Advanced Second Control Center | | $ 1,456.00 | $ 1,456.00 |
| | PJM Scheduling, System Control and Dispatch Service - Capacity Resource/Obligation Mgmt. | | $ 943.95 | $ 943.95 |
| | PJM Scheduling, System Control and Dispatch Service - Control Area Administration | | $ 9,436.12 | $ 9,436.12 |
| | PJM Scheduling, System Control and Dispatch Service - Market Support | | $ 2,205.55 | $ 2,205.55 |
| | PJM Scheduling, System Control and Dispatch Service - Market Support Offset | | $ (166.67) | $ (166.67) |
| | PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration | | $ 85.07 | $ 85.07 |
| | PJM Scheduling, System Control and Dispatch Service Refund - Capacity Resource/Obligation Mgmt. | | $ (29.45) | $ (29.45) |
| | PJM Scheduling, System Control and Dispatch Service Refund - Control Area Administration | | $ (298.41) | $ (298.41) |
| | PJM Scheduling, System Control and Dispatch Service Refund - Market Support | | $ (73.41) | $ (73.41) |
| | PJM Scheduling, System Control and Dispatch Service Refund - Regulation Market Administration | | $ (3.82) | $ (3.82) |
| | PJM Settlement, Inc. | | $ 166.67 | $ 166.67 |
| | Reactive Services | | $ 92,216.76 | $ 92,216.76 |
| | Reactive Supply and Voltage Control from Generation and Other Sources Service | | $ 35,854.40 | $ 35,854.40 |
| | Real-Time Load Response Charge Allocation | | $ 292.85 | $ 292.85 |
| | Regulation and Frequency Response Service | | $ 17,959.80 | $ 17,959.80 |
| | Reliability First Corporation (RFC) | | $ 847.69 | $ 847.69 |
| | Synchronized Reserve | | $ (41,685.83) | $ (41,685.83) |
| | Synchronous Condensing | | $ 39.45 | $ 39.45 |
| | Transmission Enhancement | | $ 9,972.34 | $ 9,972.34 |
| | Transmission Owner Scheduling, System Control and Dispatch Service | | $ 4,143.63 | $ 4,143.63 |
| **480-8102-592-95-90 Total** | | | **$ 463,291.80** | **$ 463,291.80** |
| ⊟480-8102-592-95-91 | Balancing Spot Market Energy | | $ (100,354.59) | $ (100,354.59) |
| | Balancing Transmission Congestion | | $ 8,479.09 | $ 8,479.09 |
| | Balancing Transmission Losses | | $ (1,084.88) | $ (1,084.88) |
| | Day-ahead Spot Market Energy | | $ 653,872.04 | $ 653,872.04 |
| | Day-ahead Transmission Congestion | | $ (236,810.31) | $ (236,810.31) |
| | Day-ahead Transmission Losses | | $ 32,065.47 | $ 32,065.47 |
| | Inadvertent Interchange | | $ 244.69 | $ 244.69 |
| | Load Reconciliation for Balancing Operating Reserve | | $ (404.51) | $ (404.51) |
| | Load Reconciliation for Day-ahead Scheduling Reserve | | $ (974.02) | $ (974.02) |
| | Load Reconciliation for FERC Annual Recovery | | $ (277.29) | $ (277.29) |
| | Load Reconciliation for Inadvertent Interchange | | $ 65.19 | $ 65.19 |
| | Load Reconciliation for Market Monitoring Unit (MMU) Funding | | $ (17.73) | $ (17.73) |
| | Load Reconciliation for Non-Synchronized Reserve | | $ (25.44) | $ (25.44) |
| | Load Reconciliation for North American Electric Reliability Corporation (NERC) | | $ (46.28) | $ (46.28) |
| | Load Reconciliation for Organization of PJM States, Inc. (OPSI) Funding | | $ (3.19) | $ (3.19) |
| | Load Reconciliation for PJM Scheduling, System Control and Dispatch Service | | $ (951.16) | $ (951.16) |
| | Load Reconciliation for PJM Scheduling, System Control and Dispatch Service Refund | | $ 37.81 | $ 37.81 |
| | Load Reconciliation for Reactive Services | | $ (7,489.21) | $ (7,489.21) |
| | Load Reconciliation for Regulation and Frequency Response Service | | $ (1,505.34) | $ (1,505.34) |
| | Load Reconciliation for Reliability First Corporation (RFC) | | $ (66.14) | $ (66.14) |
| | Load Reconciliation for Schedule 9-6 - Advanced Second Control Center | | $ (100.58) | $ (100.58) |
| | Load Reconciliation for Spot Market Energy | | $ (201,652.28) | $ (201,652.28) |
| | Load Reconciliation for Synchronized Reserve | | $ (532.38) | $ (532.38) |
| | Load Reconciliation for Synchronous Condensing | | $ (9.04) | $ (9.04) |
| | Load Reconciliation for Transmission Congestion | | $ (16,651.45) | $ (16,651.45) |
| | Load Reconciliation for Transmission Losses | | $ (11,295.46) | $ (11,295.46) |
| | Load Reconciliation for Transmission Owner Scheduling, System Control and Dispatch Service | | $ (342.23) | $ (342.23) |
| | Meter Error Correction | | $ (3,432.58) | $ (3,432.58) |
| **480-8102-592-95-91 Total** | | | **$ 110,738.20** | **$ 110,738.20** |
| ⊟480-8102-592-95-92 | Balancing Spot Market Energy | $ (148,788.37) | | $ (148,788.37) |
| | Balancing Transmission Congestion | $ 45,730.58 | | $ 45,730.58 |
| | Balancing Transmission Losses | $ 2,320.20 | | $ 2,320.20 |
| **480-8102-592-95-92 Total** | | **$ (100,737.59)** | | **$ (100,737.59)** |
| ⊟480-8102-592-95-93 | Reactive Supply and Voltage Control from Generation and Other Sources Service | $ (29,467.58) | | $ (29,467.58) |
| | Transmission Losses | $ (19,115.62) | | $ (19,115.62) |
| **480-8102-592-95-93 Total** | | **$ (48,583.20)** | | **$ (48,583.20)** |
| **Grand Total** | | **$ (1,478,445.79)** | **$ 1,933,618.08** | **$ 455,172.29** |

# The Energy Authority, Inc.

Monthly Management Committee Update – June 2014

July 24, 2014

Prepared by:

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*Client Services Manager*
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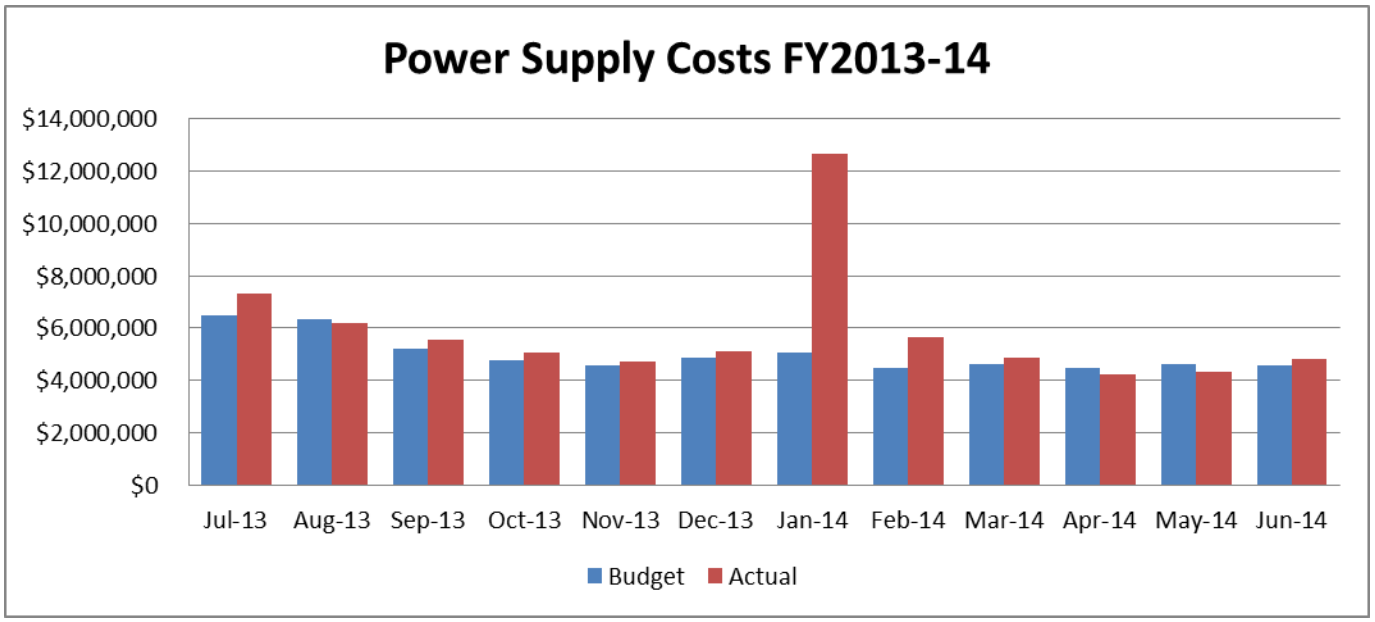
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# I. Executive Summary

## A. Power Supply Summary:




Overall Power Supply costs were $257,388 over budget due to higher market prices and PJM fees.

Dover's budgeted cost for all power supply (capacity AND energy) was $66.98/MWh. The actual cost of all power supply (capacity AND energy) was $72.69/MWh.

The cost of energy alone was $52.01/MWh, versus a budgeted energy cost of $48.13.

Dover's hedge purchases totaled 53,136 MWh, which was 80% of the actual load. The budgeted hedge purchase totaled 26,160, which was 38% of the budgeted load.

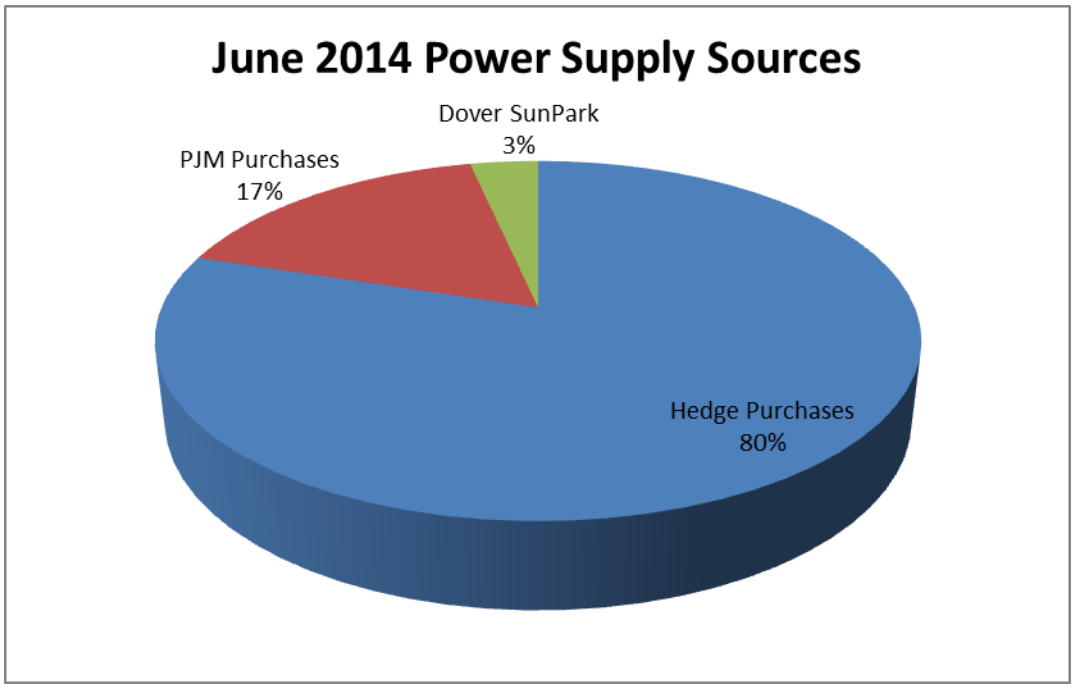
Dover's power purchases from hedge transactions totaled $2,546,942. Purchases from PJM (energy and fees) totaled $1,145,521. This number includes DA spot market energy of $657,666 and Network Integration Transmission Service charge of $403,721.

Dover's total load was 66,511 MWh versus a forecasted load of 68,340 MWh.

Dover's planned energy purchase from the SunPark solar installation was 2,328 MWh. Dover's actual energy purchase from the SunPark installation was 2,280 MWh.

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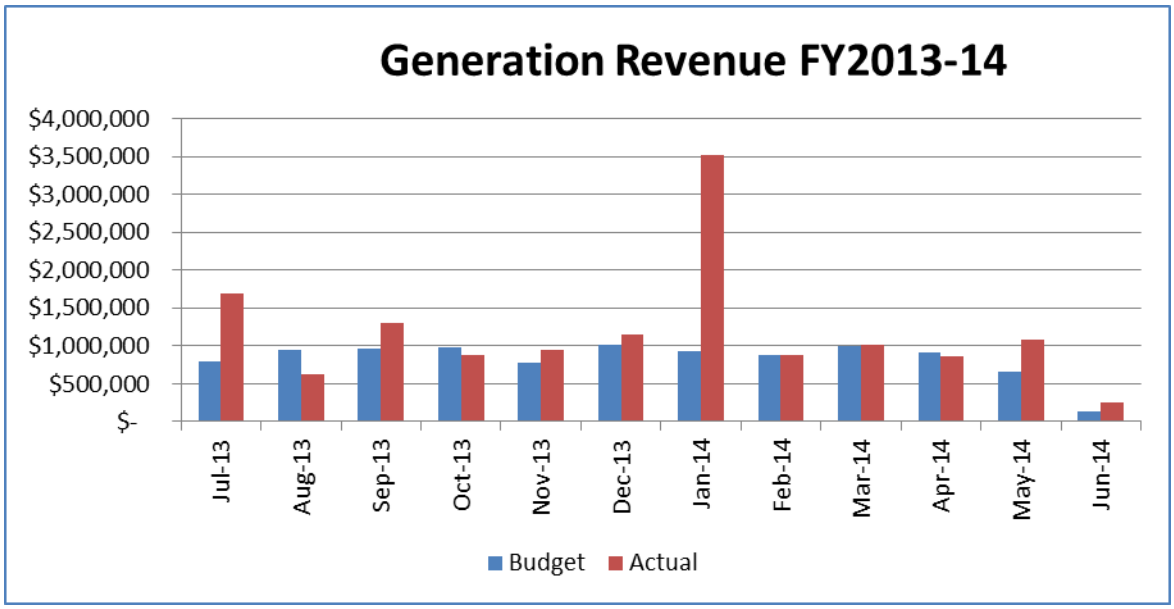
## Supply Source Summary:




## Supply Variance:

| | Budget | Actual | Variance |
|---|---|---|---|
| **Gross Load** | 68,340 | 66,511 | 1,829 |
| **Wholesale Load** | 66,012 | 64,230 | 1,782 |
| **Hedged Volume (MWh)** | 26,160 | 53,136 | (26,976) |
| **Unhedged Volume (MWh)** | 39,852 | 11,094 | 28,758 |
| **Dover SunPark Volume (MWh)** | 2,328 | 2,280 | 48 |
| **Renewable Energy Credits Volume** | 349 | 303 | 46 |
| **Hedged Cost ($/MWh)** | $ 55.46 | $ 47.93 | $ 7.53 |
| **Unhedged Energy Cost ($/MWh)** | $ 41.04 | $ 61.16 | $ (20.12) |
| **Solar Energy Cost ($/MWh)** | $ 87.03 | $ 102.42 | $ (15.39) |
| **Energy Costs ($/MWh)** | **$48.13** | **$52.01** | **($3.88)** |
| **All-in Costs - Energy, Capacity and RECs ($/MWh)** | **$66.98** | **$72.69** | **($5.71)** |

## B. Generation Summary:




Dover generated 5,649 MWh in the month. Net generation revenue was $(246,277) vs. a budget of $(142,526).

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**Generation Breakdown:**

# City of Dover

## Monthly Wholesale Generation

June, 2014

Net Generation
**5648.821**

### All In Generation

| | | | |
|---|---|---|---|
| PJM - Generation | | | |
| | Economic and Reliability Dispatch | $ | 463,271.30 |
| | Generation Capacity Credit | $ | 702,347.40 |
| | Black Start and Transmission Losses | $ | 59,930.12 |
| Natural Gas & Oil Consumption | | | |
| | Purchases for Generation | $ | (288,115.13) |
| | Natural Gas Transport | $ | (46,491.50) |
| | Eastern Shore Cashout | $ | 3,471.13 |
| | Oil Consumption | $ | (24,789.49) |

### Production Margin

| | | | |
|---|---|---|---|
| PJM - Generation | | | |
| | Economic and Reliability Dispatch | $ | 463,271.30 |
| Natural Gas & Oil Consumption | | | |
| | Purchases for Generation | $ | (288,115.13) |
| | Natural Gas Transport | $ | (46,491.50) |
| | Eastern Shore Cashout | $ | 3,471.13 |
| | Oil Consumption | $ | (24,789.49) |
| Gross Production Margin | | $ | 107,346.31 |
| $/MWh Generation Production Gross Margin | | $ | 19.00 |

## C. Emissions Summary:

**Emissions Allowance Summary through June 30, 2014**

McKee Run3 and VanSant Unit 11 (Dover's two units covered by the Clean Air Interstate Rule or CARI) operated during the month of June, so there were additional emissions during this period.

| CAIR EMISSION ALLOWANCE SUMMARY | | | | |
|---|---|---|---|---|
| **Date** | **Action** | **$SO_2$ Allowances** | **$NO_x$ Allowances[1]** | |
| | | | **Seasonal** | **Annual** |
| 1/1/09 | 2008 Carryover | 3,240 | 0 | 0 |
| 1/1/09 | 2009 Allocation | 2,723 | 53 | 80 |
| 2/1/10 | 2010 Allocation | 2,039 | 50 | 78 |
| 1/1/11 | 2011 Allocation | 1,988 | 49 | 78 |
| 4/1/11 | 2011 Reallocation | | 2 | 4 |
| 1/11/12 | 2012 Allocation | 1,988 | 51 | 80 |
| 10/4/2012 | 2013 Allocation | 1,988 | 49 | 76 |
| | 2014 Allocation | 1,988 | 49 | 76 |
| 9/29/09 | $SO_2$ Sales | (1,500) | | |
| 11/12/09 | $NO_x$ Ann. Sales | | | (45) |
| 11/13/09 | $SO_2$ Sales | (1,410) | | |
| 11/20/09 | $NO_x$ Seas. Sales | | (25) | |
| 12/31/09 | 2009 Emissions[2] | (1) | (6) | (13) |
| 12/31/10 | 2010 Emissions | 0 | (54) | (54) |
| 10/31/10 | EPA Linearity Testing Req. | | (68) | (68) |
| 2011 | 2010 Deficit $NO_x$ Purchases | | 53 | 22 |
| Aug 2011 | Revised 2010 ECMPS data | | 30 | 30 |
| Nov 2011 | $NO_x$ Seas. Sales (DEMEC) | | (1) | |
| 12/31/11 | 2011 Emissions[2] | (1) | (32) | (36) |
| 12/31/12 | 2012 Emissions[2] | (1) | (37) | (37) |
| Nov 2012 | $NO_x$ Seas. Sales (DEMEC) | | (2) | |
| 2/13/2013 | $NO_x$ Annual. Sales (DEMEC) | | | (3) |
| 11/15/13 | $NO_x$ Annual Sales (DEMEC) | | (5) | |
| 12/31/13 | 2013 Emissions | (0) | (20) | (20) |
| **6/30/14** | **2014 CYTD Emissions** | **(1)** | **(12)** | **(26)** |
| **REMAINING ALLOWANCES** | | **13,040** | **85** | **224** |

On August 21, 2012, a three-judge panel of the U.S. District Court of Appeals (DCA) in Washington vacated EPA's Cross State Air Pollution Rule (CSAPR) which would have

[1] Per CAIR, starting in 2009, NOx emissions are governed by a seasonal and annual program.
[2] Under CAIR, pre-CAIR SO2 allowances are retired at a rate of 2 allowances for each ton emitted. It is assumed that pre-CAIR allowances will be retired before CAIR allowances.

become effective on January 1, 2012. The DCA instructed EPA to continue administering the Clean Air Interstate Rule (CAIR). EPA appealed the DCA ruling to the U.S. Supreme Court, which heard arguments on December 10th, 2013.

On April 29th, 2014, the U.S. Supreme Court overturned the DCA opinion; however it did not immediately reinstate CSAPR. It sent the rule back to the DCA for further action consistent with the Supreme Court's opinion. On June 26th, 2014, EPA requested the DCA to reinstate CSAPR, with Phase 1 compliance deadlines being changed by 3 years to 2015 and 2016, and Phase 2 compliance deadlines being changed to 2017. To date, the DCA has not acted on EPA's motion to lift the DCA's stay from 2011.

While Delaware is included in the CAIR footprint, it is not included in the CSAPR footprint. CAIR allowances cannot be used for CSAPR compliance, so Dover's CAIR allowances will become valueless when CSAPR is reinstated. The separate Clean Air Act acid rain deposition control program will remain in effect, however the CAIR provisions for $SO_2$ will also disappear for Delaware.

Market liquidity for CAIR allowances continues to be low, with few transactions occurring. The following table shows estimated values for Dover's banked allowances, based on settlement prices on the Intercontinental Exchange (ICE).

| **Mark-to-Market for CAIR Allowances** | | | |
|---|---|---|---|
| **Commodity** | **$/Ton ICE Settlement as of July 21, 2014** | **Tons** | **Extended Value** |
| $SO_2$ Allowances (2009 & earlier) | $ 1.35 | 5,089 | $ 6,870 |
| $SO_2$ Allowances (2010-14) | $ 0.85 | 7,951 | 6,758 |
| $NO_x$ Allowances - Seasonal | $25.00 | 87 | 2,175 |
| $NO_x$ Allowances - Annual | $65.00 | 224 | 14,560 |
| **TOTAL** | | | **$30,363** |

## Regional Greenhouse Gas Initiative, Pending Federal Regulations

The State of Delaware is a participant in the Regional Greenhouse Gas Initiative (RGGI). The City of Dover must comply with RGGI by surrendering carbon dioxide ($CO_2$) allowances pursuant to the State of Delaware's laws (Title 7, Chapter 60, Sub-Title II-A). Delaware has elected a combined emissions allowance allocation/auction mechanism for RGGI, in which 40% of $CO_2$ allowances were allocated to sources for 2009, declining by 8% per year so that by 2014, all $CO_2$ allowances are auctioned.

Dover had more than a sufficient number of RGGI allowances allocated to it to cover its requirements through the first compliance period (calendar years 2009-2011). Any unused allowances are carried over ("banked") for subsequent years. The table below shows RGGI allowance allocations, deductions and the cumulative balance by year (column 8).

| CO2 Allowance Summary (6/30/2014) | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| $CO_2$ Allowance Vintage | $CO_2$ Allowances Sold YTD | $CO_2$ Allowances (Per Facility, Prior to Sale) | | Allocated $CO_2$ Allowances | $CO_2$ Tons Emitted | Annual $CO_2$ Allowance Balance | Cumulative Balance |
| | | ***McKee Run*** | ***VanSant*** | | | | |
| 2009 | 0 | 60,128 | 2,056 | 62,184 | (5,796) | 56,388 | 56,388 |
| 2010 | 0 | 48,102 | 1,645 | 49,747 | (32,971) | 16,776 | 73,164 |
| 2011 | 0 | 36,077 | 1,234 | 37,311 | (17,763) | 19,548 | 92,712 |
| 2012 | 0 | 27,058 | 925 | 27,983 | ( 15,265) | 11,793 | 104,505 |
| 2013 | 0 | 15,032 | 514 | 24,818[3] | (10,231) | 16,091 | **119,091** |
| 2014 | 0 | -0- | -0- | -0- | (10,818) | | **108,486** |

Dover no longer receives allocations of RGGI allowances. The Cumulative Balance (column 8) – aka "Banked Allowances") can be utilized for generation in 2014 and future years. Once the banked allowances have been fully utilized, Dover will be required to purchase RGGI allowances through the auctions or through over-the-counter markets. Assuming that Dover does not sell any banked allowances and produces 20,000 tons per year, it should be able to maintain a positive balance through around 2019.

Dover could elect to sell all or a portion of its banked allowances now and re-acquire allowances at a later date; however TEA is currently of the opinion that Dover will be better off retaining its banked allowances for use during future compliance years.

The most recent RGGI spot auction occurred on June 4th, 2014; the auction cleared at $5.02/ton. The next auction will occur on September 3rd, 2014. RGGI futures settlement prices posted on Intercontinental Exchange (ICE) on July 21, 2014 ranged from $4.95 to $5.26/ton, depending settlement month and vintage. **Based on the July 21, 2014 ICE price for the December 2014 strip ($4.98/ton), the estimated market value of Dover's existing 118,486 ton RGGI allowance bank is $540,260.**

[3] Includes Q3 2013 allocations of 7,846,757 for McKee Run and 1,424,677 for VanSant.

## Renewable Energy Certificates

Dover owns two photovoltaic systems totaling 15 kW, consisting of (one 5 kW unit at the Utilities Administration Building and two 5 kW units at the McKee Run generating station. Dover also receives solar energy produced by the 10 MW Dover Sun Park which is owned by White Oak Solar Energy, LLC. In addition to the all of the physical energy produced by the Sun Park, Dover receives 15% of Sun Park's SRECS. Through the end of February 2014, Dover has accumulated a total of 7,004 SRECS from these renewable energy resources.

While Delaware does periodically hold auctions for SRECs, these auctions are for size tiers N1 – N3, E1 and E2. The Dover Sun Park is in the N4 tier for very large facilities. State-wide carve outs for Tier 4 has been fully subscribed, so there is not a market for tier 4 SRECs in Delaware.

The nearest viable market for Dover's SRECs is Pennsylvania. SREC Trade (www.srectrade.com) closed an auction it conducted on July 15, 2014. The clearing prices for Pennsylvania SRECS are used in the table below.

| SREC Vintage (June 1 – May 31) | Auction Clearing Price | SREC Quantity | Market Value |
|---|---|---|---|
| 2010/2011 | $ 0 (N/A) | 13 | $ 0 |
| 2011/2012 | $ 30.05 (July 2014 Auction) | 2,375 | 71,369 |
| 2012/2013 | $31.05 (July 2014 Auction) | 2,725 | 84,611 |
| 2013/2014 | $32.05 (July 2014 Auction) | 2,701 | 86,567 |
| **TOTAL** | | **7,814** | **$242,547** |

TEA continues to recommend to Dover to retain these allowances for compliance with its Renewable Portfolio Standard (RPS) which DEMEC is working on. DEMEC has not provided TEA with any instructions to transfer SRECs to DEMEC's account or retire an appropriate number of SRECs to comply with the DEMEC RPS. NOTE: SRECs in both Delaware and Pennsylvania expire without value after 3 years.

DEMEC has invoiced Dover for its non-solar RECs for the last compliance period. Procedures for tracking and retiring Dover's RECs under the DEMEC RPS should be developed.

## D. Operations Management Summary:

During the month of June, there were no restricted work days or lost time accidents. The facility has now gone 3 years, 8 months and 16 days (1,352 days) through June 2014 without an OSHA Recordable Accident or a Lost Time reportable accident. On June 16, 2014, eight plant staff members completed competent person scaffold training and received certifications. The plant also had inspections performed by a third party on the plant fire extinguishers and on the plant deluge system. Both passed with limited repairs or replacement of equipment needed.

The plant received no Notice of Violations (NOVs) during the month. McKee Run and VanSant are exempt from the reporting criteria for the Toxic Release Inventory Report and therefore no report was submitted for 2014. The June DMR was submitted for the McKee Run site with no NPDES exceedences. There were no opacity deviations during the month of June 2014. McKee Run Unit 2 and VanSant Unit 11 underwent stack testing as deemed necessary by Title V requirements. Also during the month, a linearity check was performed by ICE staff on Unit 3 since it was apparent that the total number of operating hours for the quarter would exceed the operating hour threshold which would then require this calibration test to be performed.

During the month of June, there were six IWW discharges to the Kent County Sewer. Sampling occurred on June 16, 2014 and laboratory analytical data indicated no exceedences. The June SIU Report was submitted to Kent County.

## E. Risk Management Summary:

Forward power prices in PJM are lower than last month.

The current projected cost of service is below:

| PY | Hedge Ratio | Blended Cost ($/MWh) | Monthly Change ($/MWh) |
|---|---|---|---|
| 2014-15 | 76% | $45.19 | ($1.39) |
| 2015-16 | 58% | $42.35 | ($1.57) |
| 2016-17 | 24% | $41.38 | ($2.18) |
| 2017-18 | 17% | $42.46 | ($2.91) |

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# II. Budget Report

| | Budget Jun-14 | Actual Jun-14 | Variance |
|---|---|---|---|
| | | | |
| **Gross Load** | **68,340** | **66,511** | **1,829** |
| | | | |
| **Power Supply** | | | |
| Hedged Energy | $1,450,896 | $2,546,942 | ($1,096,046) |
| PJM - Energy, Congestion & Losses | $1,635,595 | 678,517 | $957,078 |
| PJM - ARR, Transmission and Fees | $395,000 | 467,004 | ($72,004) |
| Dover SUN Park Energy | $202,614 | $233,552 | ($30,939) |
| Dover SUN Park RECs | $25,000 | $43,323 | ($18,323) |
| Management Fees | $83,000 | $83,000 | $0 |
| PJM - Capacity UCAP Obligated Purchased | $785,403 | $ 782,556.87 | $2,846 |
| **Subtotal - Power Supply** | **$4,577,508** | **$4,834,896** | **($257,388)** |
| | | | |
| **Power Generation O&M** | | | |
| Plant O&M | $889,731 | $1,140,690 | ($250,959) |
| | | | |
| **Subtotal Generation O&M** | **889,731.00** | **1,140,690.00** | **($250,959)** |
| | | | |
| **Power Generation Production Margin** | | | |
| PJM - Economic and reliability dispatch | $0 | $ (463,271.30) | $463,271 |
| Fixed Fuel and Transport Charges | $0 | $ 331,135.50 | ($331,135) |
| **Subtotal Generation Production Margin** | **$0** | **$ (132,135.80)** | **$132,136** |
| | | | |
| **Power Generation Non-Production Revenue** | | | |
| PJM - Generation Capacity Credit | ($716,625) | $ (702,347.40) | ($14,278) |
| Emissions Allowance Sales | $0 | $ - | $0 |
| PJM - Black Start & Transmission Losses | ($30,580) | $ (59,930.12) | $29,350 |
| **Subtotal - Non-Production Revenue** | **($747,205)** | **($762,278)** | **$15,073** |
| | | | |
| **SubTotal - All Generation** | **$142,526** | **$246,277** | **($103,751)** |
| | | | |
| **Total - Utilities Cost** | **$4,720,034** | **$5,081,173** | **($361,139)** |
| | | | |
| Unit Costs | | | |
| Total - Power Supply | $66.98 | $72.69 | ($5.71) |
| Total - Power Generation | $2.09 | $3.70 | ($1.62) |
| Final Cost of Service to City of Dover Ratepayers | $69.07 | $76.40 | ($7.33) |

## Variance Analysis:

Power Supply

- Dover consumed 1,829 MWh less than forecast for the month.
- PJM energy costs were higher than expected due to higher market prices. PJM Fees were higher than budget.
- Hedges were placed at below budget levels but were unable to offset the higher fees, solar costs and market prices. This resulted in a net power supply cost of $72.69/MWh, $5.71/MWh above budget.
- For the month, the city realized an unfavorable variance of $257,388 for power supply vs. the monthly budget.
- Dover Sun Park generated 48 MWh less than forecast.

Generation

- Power generation had a favorable budget variance of $132,136.
- Plant O&M expenses had an unfavorable budget variance of $250,959 for the month.

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## YTD Variance Report:

| | Budget YTD | Actual YTD | Variance |
|---|---|---|---|
| | | | |
| **Gross Load** | **743,977** | **762,254** | **(18,277)** |
| | | | |
| **Power Supply** | | | |
| Hedged Energy | $23,831,966 | $29,116,756 | ($5,284,790) |
| PJM - Energy, Congestion & Losses | $12,812,840 | $15,040,866 | ($2,228,026) |
| PJM - ARR, Transmission and Fees | $4,740,000 | $7,606,895 | ($2,866,895) |
| Dover SUN Park Energy | $1,565,800 | $1,821,037 | ($255,237) |
| Dover SUN Park RECs | $300,000 | $381,150 | ($81,150) |
| Management Fees | $996,000 | $996,000 | $0 |
| PJM - Capacity UCAP Obligated Purchased | $15,787,176 | $15,504,095 | $283,081 |
| **Subtotal - Power Supply** | **$60,033,782** | **$70,466,799** | **($10,433,017)** |
| | | | |
| **Power Generation O&M** | | | |
| Plant O&M | $6,015,800 | $5,909,541 | $106,259 |
| | | | |
| **Subtotal Generation O&M** | **$6,015,800** | **$5,909,541** | **$106,259** |
| | | | |
| **Power Generation Production Margin** | | | |
| PJM - Economic and reliability dispatch | ($230,472) | ($5,996,924) | $5,766,452 |
| Fixed Fuel and Transport Charges | $0 | $2,605,129 | ($2,605,129) |
| **Subtotal Generation Production Margin** | **($230,472)** | **($3,391,795)** | **$3,161,323** |
| | | | |
| **Power Generation Non-Production Revenue** | | | |
| PJM - Generation Capacity Credit | ($15,079,750) | ($15,065,472) | ($14,278) |
| Emissions Allowance Sales | $0 | $0 | $0 |
| PJM - Black Start & Transmission Losses | ($396,960) | ($1,171,024) | $774,064 |
| **Subtotal - Non-Production Revenue** | **($15,476,710)** | **($16,236,496)** | **$759,786** |
| | | | |
| **SubTotal - All Generation** | **($9,691,382)** | **($13,718,750)** | **$4,027,368** |
| | | | |
| **Total - Utilities Cost** | **$50,342,400** | **$56,748,049** | **($6,405,649)** |
| | | | |
| Unit Costs | | | |
| Total - Power Supply | $80.69 | $92.45 | ($11.75) |
| Total - Power Generation | ($13.03) | ($18.00) | $4.97 |
| Final Cost of Service to City of Dover Ratepayers | $67.67 | $74.45 | ($6.78) |

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**Operations Management**

# NAES Corporation
## Dover, Delaware
## June 2014
## Monthly Report



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## 1.0 Environmental, Health and Safety:

During the month of June, there were no restricted work days or lost time accidents. The facility has now gone 3 years, 8 months and 16 days (1,352 days) through June 2014 without an OSHA Recordable Accident or a Lost Time reportable accident. On June 16, 2014, eight plant staff members completed competent person scaffold training and received certifications. The plant also had inspections performed by a third party on the plant fire extinguishers and on the plant deluge system. Both passed with limited repairs or replacement of equipment needed.

The plant received no Notice of Violations (NOVs) during the month. McKee Run and VanSant are exempt from the reporting criteria for the Toxic Release Inventory Report and therefore no report was submitted for 2014. The June DMR was submitted for the McKee Run site with no NPDES exceedences. There were no opacity deviations during the month of June 2014. McKee Run Unit 2 and VanSant Unit 11 underwent stack testing as deemed necessary by Title V requirements. Also during the month, a linearity check was performed by ICE staff on Unit 3 since it was apparent that the total number of operating hours for the quarter would exceed the operating hour threshold which would then require this calibration test to be performed.

During the month of June, there were six IWW discharges to the Kent County Sewer. Sampling occurred on June 16, 2014 and laboratory analytical data indicated no exceedences. The June SIU Report was submitted to Kent County.

| Environmental, Health, and Safety Statistics | | |
|---|---|---|
| | Month (June) | Fiscal Year to Date (7/1/13-6/30/14) |
| NOVs | 0 | 0 |
| Opacity Deviations | 0 | 11 |
| Environmental Deviations | 0 | 0 |
| OSHA Recordable | 0 | 0 |
| OSHA LTA's | 0 | 0 |
| First Aid cases | 0 | 1 |
| Restricted Workday Accident | 0 | 0 |
| Near Miss | 0 | 2 |
| Man Hours Worked | 4,651.75 | 52,955.25 |
| Date last OSHA Recordable | | 10/14/10 |
| Date last Lost Time Accident | | 10/14/10 |
| Days since last OSHA recordable | | 1,352 |
| Days since last Lost Time Accident | | 1,352 |

**Emissions ($NO_x$, $CO_2$ & $SO_2$) All data thru 6/30/14**

| NOx Summary – Ozone Season (May-Sep) Tons | | | | | |
|---|---|---|---|---|---|
| *Year* | *Unit #1* | *Unit #2* | *Unit #3* | *Unit #11* | *TOTAL* |
| 2011 | 1.8 | 1.5 | 31.4 | 1.4 | 36.1 |
| 2012 | 1.2 | 1.0 | 35.8 | 1.0 | 33.1 |
| 2013 | 1.1 | 1.7 | 19.3 | 1.3 | 23.4 |
| 2014 | 0.0 | 0.2 | 10.3 | 0.2 | 10.7 |
| **NOx Summary - Year (Jan-Dec) Tons** | | | | | |
| *Year* | *Unit #1* | *Unit #2* | *Unit #3* | *Unit #11* | *TOTAL* |
| 2011 | 1.8 | 1.5 | 32.6 | 2.9 | 38.8 |
| 2012 | 1.2 | 1.1 | 35.8 | 1.0 | 36.9 |
| 2013 | 1.1 | 1.7 | 19.4 | 1.3 | 23.5 |
| 2014 | 0.5 | 0.7 | 15.1 | 3.1 | 19.4 |
| **$SO_2$ Summary - Year (Jan-Dec) Tons** | | | | | |
| *Year* | *Unit #1* | *Unit #2* | *Unit #3* | *Unit #11* | *TOTAL* |
| 2011 | 0.0 | 0.0 | 0.1 | 0.5 | 0.6 |
| 2012 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 2013 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 2014 | 0.0 | 0.0 | 0.4 | 0.6 | 1.0 |

| 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 | 60,128 | 2,056 | 5,796 | 56,388 |
| 2010 | 0 | 48,102 | 1,645 | 32,971 | 16,776 |
| 2011 | 0 | 36,077 | 1,234 | 17,763 | 19,548 |
| 2012 | 0 | 27,058 | 925 | 15,265 | 11,793 |
| 2013 | 0 | 22,879 | 1,939 | 10,231 | 14,587 |
| 2014 | 0 | 0 | 0 | 10,554 | (10,554) |
| | | | Total CO2 Allowance Balance | | 102,225 |

***Note: CO2 allowance values are provided by the RGGI CO2 Allowance Tracking System.**
**Note: All emissions (NOx, SO2 and CO2) totals for 2013 are unofficial.**
**#Note: Additional CO2 Emission Values were added to 2013 balances by RGGI COATS- 7,846.757 for McKee Run and 1,424.677 for VanSant**

| CAIR NOx Allowances Summary* | | | | | | | |
|---|---|---|---|---|---|---|---|
| CAIR NOx Allowance Vintage | CAIR NOx Allowances Sold YTD | NOx Allowances Available (Per Facility, Prior to Sale) | | Total NOx Tons Emitted (Yr/ Season) McKee Run - VanSant | CAIR NOx Allowances Purchased YTD | NOx Allowance Balance | |
| | | *McKee Run (Yr/Season)* | *VanSant (Yr/Season)* | | | *McKee Run (Yr/Season)* | *VanSant (Yr/Season)* |
| 2010 and earlier | 3*** | | | | | 27/0 | 0/2 |
| 2011 | 0 | 77/48 | 5/3 | 33/31– 3/1 | 0/0 - 0/0 | 42/10 | 2/2 |
| 2012 | 2** | 75/46 | 5/3 | 36/36 – 1/1 | 0/0 - 0/0 | 39/10 | 2/0 |
| 2013 | 5** | 77/48 | 5/3 | 19/19 – 1/1 | 0/0 - 0/0 | 58/24 | 4/2 |
| 2014 | 0 | 71/46 | 5/3 | 23/11 - 3/1 | 0/0 – 0/0 | 48/35 | 2/2 |
| | | | | Total NOx Allowance Balance | | 187/79 | 10/6 |

***Note – Emissions allowances are deducted according to oldest vintage first or unless otherwise directed.**
****Note – The facility transferred Ozone Season allowances to a third party.**

| $SO_2$ 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* | | |
| **2010 and earlier** | 0 | 4815 | 276 | 0 | 5089 |
| **2011** | 0 | 1850 | 138 | 1 | 1988* |
| **2012** | 0 | 1850 | 138 | 1 | 1988* |
| **2013** | 0 | 1850 | 138 | 0 | 1988* |
| **2014** | 0 | 1850 | 138 | 1 | 1987 |
| | | | Total SO2 Allowance Balance | | 13,040 |

***Note – Emissions allowances are deducted according to oldest vintage first, unless otherwise directed.**

## 2.0 Financial

### Financial – Current Month

| Month – June | | | |
|---|---|---|---|
| | Actual | Budget | Variance |
| Personnel | 748,707 | 634,580 | (114,127) |
| Materials & Supplies | 45,581 | 8,190 | (37,391) |
| Administrative Expenses | 346,402 | 246,761 | (99,641) |
| Total | **$1,140,690** | **$889,531** | **($251,159)** |

### Financial – Fiscal Year to Date

| Number of Months – 12 | | | |
|---|---|---|---|
| | Actual | Budget | Variance |
| Personnel | 3,471,521 | 3,791,300 | 319,779 |
| Materials & Supplies | 217,451 | 223,600 | 6,149 |
| Administrative Expenses | 2,040,605 | 2,000,900 | (39,705) |
| Total | **$5,729,577** | **$6,015,800** | **$286,223** |

## 2.1 Variance analysis:

The estimated actual expenses (possible accruals) for the month of June are $1,140,690 against a budgeted amount of $889,531 for an unfavorable variance of $251,159 or 28.23%. The variance was due to the following:

**PERSONNEL EXPENSES** – An unfavorable monthly variance of $114,127 was due to having three (3) payrolls and a week of accrual payroll period expensed versus the two (2) that were budgeted for June. As a result, this impacted three labor accounts – straight time, overtime, and labor burdens. A portion of this variance was positively offset by lower than budgeted incentive and incentive burden expenses.

**MATERIALS AND SUPPLIES EXPENSES**- An unfavorable monthly variance of $37,391 was due to increased operational time resulting from required emissions testing and dispatched hours causing an increase in water /sewer and water treatment chemical costs.

**ADMINISTRATIVE EXPENSES –** An unfavorable monthly variance of $99,641 due to higher electricity usage costs than anticipated as a result of increased operational time resulting from required emissions testing and dispatched hours.

The forecasted expenses, not counting possible accruals, for this fiscal year are $5,729,577 expensed versus an approved budget of $6,015,800 thereby realizing a 95.24% expenditure rate.

## 3.0 Operations

**Unit Operations / Outages / Trips:** Unit 3 was dispatched eight times by PJM in the month of June. On June 10, a capacity test was completed on Unit 3 for the summer run. On June 18, due to high vibration during start up, Unit 3 was put back on turning gear. The Unit 3 missed the 1100 start time requested by PJM and ended up with a forced outage of 2.867 hours when the unit was put on line at 1322 hours. Unit 2 was operated on June 3 on oil to complete stack testing for the past year. Unit 11 was operated on June 4 and completed stack testing while combusting natural gas. Unit 1 was not dispatched for the month of June.

| Month June 2014 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 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 | 14.050 | 110.847 | 124.897 | 8.550 | 133.447 |
| Starts | # | 0 | 1 | 8 | 9 | 1 | 10 |
| Gross Generation | MWh | 0.0 | 140.247 | 6,524.978 | 6,665.225 | 223.114 | 6,888.339 |
| Net Generation | MWh | 0.0 | 133.005 | 5,984.472 | 6,117.477 | 222.935 | 6,340.412 |
| Total Auxiliaries | MWh | 0.0 | 32.071 | 805.381 | 837.452 | 1.666 | 839.118 |
| Auxiliaries purchased | MWh | 24.829 | 24.829 | 264.875 | 314.533 | 1.487 | 316.020 |
| Fuel Gas Used | MMBTU | 0.0 | 301.815 | 67,629.569 | 67,931.384 | 3,113.460 | 71,044.844 |
| Fuel Oil Used | MMBTU | 0.0 | 1,586.894 | 0.0 | 1,586.894 | 0.0 | 1,586.894 |
| Fuel Oil Used | Gallons | 0.0 | 11,466 | 0.0 | 11,466 | 0.0 | 11,466 |
| Total Fuel | MMBTU | 0.0 | 1,888.709 | 67,629.569 | 69,518.278 | 3,113.460 | 72,631.738 |
| Net Heat Rate | BTU/KWh | 0.0 | 14.200 | 11.301 | 12.750 | 13.966 | 13.358 |
| Unit Trips | # | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Capacity Factor | % | 0.0 | 1.09 | 8.15 | 6.25 | 0.79 | 5.03 |
| Availability Factor | % | 100.00 | 100.00 | 99.60 | 99.87 | 100.00 | 99.90 |
| Commercial Unavailability (CU) | % | 0.0 | 0.0 | 0.4 | 0.3 | 0.0 | 0.23 |
| Planned Outage Hours | Hours | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Maintenance Outage Hours | Hours | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Forced Outage Hours | Hours | 0.0 | 0.0 | 2.867 | 2.867 | 0.0 | 2.867 |
| Reserve Shutdown Hours | Hours | 720.00 | 705.950 | 609.153 | 2,035.103 | 711.450 | 2,746.553 |
| HW Boiler Gas Usage | MMBTU | | | | 0.0 | | 0.0 |
| Pilot Gas Usage | MMBTU | 11.649 | 43.419 | | 55.068 | | 55.068 |

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

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| 2013-2014 Fiscal Year-to-Date - June | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 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 | 135.697 | 228.082 | 423.702 | 788.214 | 84.205 | 871.686 |
| Starts | # | 7 | 8 | 32 | 47 | 21 | 68 |
| Gross Generation | MWh | 959.877 | 1,553.807 | 25,453.652 | 27,967.336 | 2,838.208 | 30,805.544 |
| Net Generation | MWh | 895.980 | 1,442.809 | 23,304.093 | 25,642.882 | 2,835.941 | 28,478.823 |
| Total Auxiliaries | MWh | 399.882 | 512.081 | 4,477.867 | 5,389.830 | 44.516 | 5,434.346 |
| Auxiliaries purchased | MWh | 378.608 | 421.138 | 2,328.752 | 3,128.498 | 41.520 | 3,170.018 |
| Fuel Gas Used | MMBTU | 8,924.901 | 15,306.390 | 244,116.258 | 268,347.549 | 22,795.615 | 291,143.164 |
| Fuel Oil Used | MMBTU | 5,504.840 | 6,050.248 | 36,178.243 | 47,733.331 | 15,380.547 | 63,113.878 |
| Fuel Oil Used | Gallons | 38,567 | 42,694 | 252,473 | 333,734 | 108,053 | 441,787 |
| Total Fuel | MMBTU | 14,429.741 | 21,356.638 | 280,294.501 | 316,080.880 | 38,176.162 | 354,257.042 |
| Net Heat Rate | BTU/KWh | 15.641 | 14.170 | 12.689 | 14.166 | 13.582 | 14.066 |
| Unit Trips | # | 1 | 1 | 0 | 2 | 5 | 7 |
| Capacity Factor | % | 0.60 | 0.97 | 2.61 | 2.15 | 0.83 | 1.86 |
| Availability Factor | % | 59.36 | 60.27 | 60.24 | 59.96 | 60.27 | 60.04 |
| Commercial Unavailability (CU) | % | 0.95 | 0.04 | 0.04 | 0.16 | 0.00 | 0.12 |
| Planned Outage Hours | Hours | 3,480.00 | 3,480.00 | 3,480.00 | 10,440.00 | 3,480.00 | 13,920.00 |
| Maintenance Outage Hours | Hours | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Forced Outage Hours | Hours | 80.000 | 0.0 | 2.367 | 82.367 | 0.0 | 82.367 |
| Reserve Shutdown Hours | Hours | 5,064.303 | 5,015.918 | 4,908.708 | 14,988.929 | 5,195.795 | 20,184.724 |
| HW Boiler Gas Usage | MMBTU | | | | 6,203.127 | | 6,203.127 |
| Pilot Gas Usage | MMBTU | 2,386.783 | 4,738.046 | | 7,124.829 | | 7,124.829 |

| Fuel Oil Inventory | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monthly Inventory (Start) | Monthly Inventory (End) | Fuel Purchases (Month) | Monthly Inventory (Change) | FY 13-14 Inventory (Start) | Fuel Purchases (FYTD) | FY 13-14 Inventory (Change) |
| McKee Run (#2 Fuel Oil) | 464,419 | 452,963 | 0 | (11,456) | 454,725 | 378,003 | (1,762) |
| VanSant (#2 Fuel Oil) | 73,235 | 73,572 | 0 | 337 | 146,133 | 35,000 | (72,561) |

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

| VanSant Lifetime through June 2014 | | | |
|---|---|---|---|
| | Actual Starts | Factored Starts | Fired Hours |
| VanSant | 1352 | 2316.75 | 4,315.70 |
| Since HGP - Dec 2004 | 258 | 649.05 | 932.12 |

**Team Report:**

Operations completed three successful capacity tests for the summer on Units 2, 3, and 11. Unit 1 has not been dispatched for the summer to complete a capacity test.

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

| Capacity Testing – FY 2013-2014 | | | | | |
|---|---|---|---|---|---|
| **Summer 2013 (June 1- Aug 31)** | | | **Winter 2013-2014 (Dec 1- Feb 28)** | | |
| Unit | Rated Net Capability (MW) | Reported Net Capability (MW) | Unit | Rated Net Capability (MW) | Reported Net Capability (MW) |
| 1 | 17 | 17.2 | 1 | 17 | 17.5 |
| 2 | 17 | 17.8 | 2 | 17 | 18.2 |
| 3 | 102 | 103.0 | 3 | 102 | 104.4 |
| 11 | 39 | 40.9# | 11 | 39 | 44.05# |
| Total | 175 | 178.9 | Total | 175 | 184.1 |

**Note: * Denotes Unit is qualified for the PJM Winter Demonstration Period Exemption Program and data has been submitted into the PJM eGADS**
**Note: # Depicts Net Corrected Capacity for Ambient Air Conditions – VanSant Unit only**

## 4.0 Maintenance

During the month of June, the Plant Maintenance staff continued addressing the backlog of work orders. There were forty-seven work orders issued with ninety-seven work orders being completed during the month. No safety work orders were entered into the plant's Computerized Maintenance Management System (MP2) during the month. The table below summarizes the monthly work order activities.

| Work Order Report | | | | |
|---|---|---|---|---|
| June - 2014 | | | | |
| Priority # | Outstanding From Previous Month | Issued This Month | Completed This Month | Outstanding at the end of the month |
| 1 | 18 | 1 | 4 | 15 |
| 2 | 86 | 9 | 40 | 55 |
| 3 | 45 | 3 | 7 | 41 |
| 4 | 5 | 0 | 0 | 5 |
| 5 | 14 | 0 | 2 | 12 |
| SW1 | 0 | 0 | 0 | 0 |
| SW2 | 0 | 0 | 0 | 0 |
| SW3 | 0 | 0 | 0 | 0 |
| SW4 | 0 | 1 | 0 | 1 |
| SW5 | 0 | 0 | 0 | 0 |
| PM | 86 | 33 | 44 | 75 |
| EM | 0 | 0 | 0 | 0 |
| Totals | 254 | 47 | 97 | 204 |
| Note: PM Work Orders are included in the priority totals | | | | |

Notable activities during the month include:

The NAES maintenance Staff completed the removal and replacement of the Unit 2 air heater soot blowing gear box. During the last operation of the unit, it was discovered that the soot blowing arm for the air heater was not moving. By repairing this gearbox, the air heater will be able to clean allowing for better performance for the boiler.

The NAES IC&E staff completed a successful Linearity test on Unit 3. Unit 3 had operated to the requirements that the test needed to be completed. By completing the test in the operating quarter, it allowed the plant to stay compliant with the state Operating Permits.

During the month, while the Operations Staff was testing Units 1 and 2 for start-up operation to ensure the boiler systems were ready to upcoming run season, they discovered an issue with being able to keep a pilot established in the boiler. The IC&E Staff started troubleshooting the issue during which they discovered that the flame scanners were being saturated with too much flame. They made adjustment to the scanners and flame was able to be established in the boiler and was able to maintain the flame.

## 5.0 Capital Improvement Projects (CIP)

| Project Number | Description | Update |
|---|---|---|
| EG1402 | Unit #3 Cooling Tower Repairs | Progress: Cooling Tower decking is 100% complete. Inspection was conducted in March as a precursor for CIP work scope development next FY.<br>Schedule: Inspection work completed and work scope modified to reflect deficiencies found during inspection. Bids requested and bid meeting held for fill replacement. Bids on project were received, have been evaluated and recommendations will be provided to COD City Council for approval in late July or August. Cash flow requirements will need to be adjusted to reflect new cash flow projections. |
| EG1404 | McKee Run Auxiliary Component Replacement | Progress: All work planned is now complete.<br>Schedule: Project closeout left to complete |
| EG1405 | VanSant Station Component Replacement | Progress: All work planned is now complete<br>Schedule: Project closeout left to complete |
| EG1406 | McKee Run HEP Pipe Repairs | Progress: The recently completed hanger adjustments will need to be checked with the unit in the hot (running) position. Expected July operations should provide an opportunity to do so.<br>Schedule: Planning is underway to develop work scope to change out one section of pipe scheduled for the fall of 2014. |
| EG1407 | Metering System Upgrades | Progress: Work scope is still being developed for an RFP.<br>Schedule: Work activities are moving forward. Working with vendor to finalize RFP documents for release in late June or July period. |
| EG1408 | McKee Run/VanSant Safety Compliance Items | Progress: With engineering support, work scopes are being developed for RFP(s) to be put out in July period. Will need to go out for bids once complete.<br>Schedule: Work activities are behind due to Fall and Spring Outage activities. |
| EG1409 | McKee Run Natural Gas Block-Bleed Valves | Progress: All work planned is now complete.<br>Schedule: Final invoice payment has been received and is being processed for payment after which the Project may be closed out. |
| EG1413 | McKee Run/VanSant Structural Preservation | Progress: Plant staff completed development of paint specifications and bid requests were received.<br>Schedule: Bids were received in early September. Work put on hold due to budget restraints. Bid updates to be requested for Fiscal 2015 |

| | | |
|---|---|---|
| | | installation. |
| EG1212 | Unit 3 Turbine Repairs | Progress: All work planned is now complete. Viable suppliers for the damaged rotor expansion instrumentation are still being researched. This equipment is obsolete and will be replaced with current technology. Replacement of other turbine supervisory instrumentation will also be investigated. High vibration experienced during hot starts will require an additional balancing during the upcoming fall outage. Plant staff is collecting data that will help determine where and how much balance weight will need to be installed in the next outage.<br>Schedule: Outage cleared on May 30. We are continuing to pursue the replacement rotor expansion instrumentation. |
| EG1415 | McKee Run Units #1-#2 Component Repairs | Progress: Cost to be incurred due to repairs on Unit 1 Boiler and turbine were completed in November.<br>Schedule: Other scope activities cancelled due to the announcement to stop operation of Units 1 and 2 in 2017. |
| EG1416 | VanSant Capacity Increase | Progress: Submitted permit application to DNEC in March and are currently discussing possible permit limitations contained in the draft permit.<br>Schedule: Award of system supplier approved in May. Planning in progress with vendor for construction drawings and scheduling. Continuing to work with DNREC on Construction permit language and limits going forward. |

## 6.0 General Plant Information

Tom Lally, Operator II-1, completed his probation period on June 3, 2014 and is continuing add to his plant knowledge.

**Training:**

Plant employees continue with General Physics safety training and environmental courses to enhance their overall knowledge of permit and safety requirements.

Topics discussed during the monthly safety committee meeting were reviewed by the entire staff. The monthly safety topic was on “Shop Hazards and Typical Incidents”.

Phil Marvel, Maintenance Supervisor, attended the Frame 6 Users Conference in Fort Myers, Florida. During the conference, Mr. Marvel had the opportunity to network with other users and to acquire greater knowledge of common unit/equipment failures, newer technology available and to develop leads on equipment suppliers.

| Calendar of Events | Date |
|---|---|
| EIA-860 Report | TBD |
| EIA-923 Report | TBD |
| NPDES Permit Expires (DNREC has Extended) | March 4, 2014 (TBD) |
| Units 1, 2, and 3 Spring Outage | March 3, 2014 – May 30, 2014 |
| Unit 11 Spring Outage | March 3, 2014 – May 30, 2014 |
| Annual VanSant Black Start Test | TBD |
| NOx Ozone Season Starts | May 1, 2014 |
| PJM Summer Capacity Test Period | June 1, 2014 – August 31, 2014 |
| FY 2013-2014 Budget Year Ends | June 30, 2014 |
| Toxic Release Inventory (TRI) Annual Report | July 1, 2014 |
| Semi-Annual Title V Certification Due | July 31, 2014 |
| NOx Ozone Season Ends | September 30, 2014 |
| Units 1, 2, 3 and 11 Fall Outage | October 1, 2014 |
| Four Year Accident Free | October 14, 2014 |
| Winter Capacity Period | December 1, 2014 to February 28, 2015 |
| NOx Emissions Reconciliation Due | March 1, 2015 |
| SO2 Emissions Reconciliation Due | March 1, 2015 |
| SARA III / Tier II Report Due | March 1, 2015 |
| Units 1, 2, and 3 Spring Outage | TBD |
| Unit 11 Spring Outage | TBD |
| Air Emission Inventory | April 30, 2015 |

## 7.0 Summary of NAES Performance to Date

| Measure | Plant Performance FY 2013-2014 Month | | Year to Date | | YTD Incentive | FY Maximum Incentive |
|---|---|---|---|---|---|---|
| Commercial Unavailability (CU) | 0.23% | | 0.12% | | $89,822 | $94,882 |
| Safety | 0 | | 0 | | $17,790 | $17,790 |
| Environmental | 0 | | 0 | | $17,790 | $17,790 |
| Capacity Tests Completed | Summer | Winter | Summer | Winter | | |
| Unit 1 | No | No | Yes | Yes | $3,559 | $3,559 |
| Unit 2 | No | No | Yes | Yes | $3,559 | $3,559 |
| Unit 3 | No | No | Yes | Yes | $21,349 | $21,349 |
| Unit 11 | No | No | Yes | Yes | $7,117 | $7,117 |
| Total YTD Incentive % | 96.95% | | ***Total YTD Incentive*** | | $160,984 | $166,045 |

Note: All units successfully completed the Summer and Winter Capacity (FY 2013-2104) Testing for PJM.

# III. Appendix 1 – PJM Invoice Breakdown

| | | Gen | Load | Grand Total |
|---|---|---|---|---|
| ⊟480-8102-592-95-49 | Capacity Resource Deficiency | | ($5,493.33) | ($5,493.33) |
| | Capacity Transfer Rights | | $58.80 | $58.80 |
| | Locational Reliability | | $787,991.40 | $787,991.40 |
| **480-8102-592-95-49 Total** | | | **$782,556.87** | **$782,556.87** |
| ⊟480-8102-592-95-50 | RPM Auction | ($702,347.40) | | ($702,347.40) |
| **480-8102-592-95-50 Total** | | **($702,347.40)** | | **($702,347.40)** |
| ⊟480-8102-592-95-90 | Auction Revenue Rights | | ($53,198.10) | ($53,198.10) |
| | Balancing Operating Reserve | | $8,283.22 | $8,283.22 |
| | Balancing Operating Reserve for Load Response | | ($1.25) | ($1.25) |
| | Black Start Service | | $2,014.95 | $2,014.95 |
| | CT Lost Opportunity Cost Allocation | | ($46.80) | ($46.80) |
| | Day-Ahead Load Response Charge Allocation | | $49.39 | $49.39 |
| | Day-ahead Operating Reserve | | $4,347.71 | $4,347.71 |
| | Day-ahead Scheduling Reserve | | $174.79 | $174.79 |
| | Expansion Cost Recovery | | $408.30 | $408.30 |
| | FERC Annual Recovery | | $4,611.46 | $4,611.46 |
| | Load Reconciliation for Transmission Losses | | $14.87 | $14.87 |
| | Market Monitoring Unit (MMU) Funding | | $285.03 | $285.03 |
| | Michigan - Ontario Interface Phase Angle Regulators | | $186.92 | $186.92 |
| | Network Integration Transmission Service | | $406,720.80 | $406,720.80 |
| | Non-Firm Point-to-Point Transmission Service | | ($470.03) | ($470.03) |
| | Non-Synchronized Reserve | | $256.52 | $256.52 |
| | North American Electric Reliability Corporation (NERC) | | $702.90 | $702.90 |
| | Organization of PJM States, Inc. (OPSI) Funding | | $46.00 | $46.00 |
| | PJM Scheduling, System Control and Dispatch Service - Advanced Second Control Center | | $1,934.16 | $1,934.16 |
| | PJM Scheduling, System Control and Dispatch Service - Capacity Resource/Obligation Mgmt. | | $921.90 | $921.90 |
| | PJM Scheduling, System Control and Dispatch Service - Control Area Administration | | $11,114.84 | $11,114.84 |
| | PJM Scheduling, System Control and Dispatch Service - Market Support | | $2,740.92 | $2,740.92 |
| | PJM Scheduling, System Control and Dispatch Service - Market Support Offset | | ($214.02) | ($214.02) |
| | PJM Scheduling, System Control and Dispatch Service - Regulation Market Administration | | $85.05 | $85.05 |
| | PJM Scheduling, System Control and Dispatch Service Refund - Capacity Resource/Obligation Mgmt. | | ($28.80) | ($28.80) |
| | PJM Scheduling, System Control and Dispatch Service Refund - Control Area Administration | | ($394.12) | ($394.12) |
| | PJM Scheduling, System Control and Dispatch Service Refund - Market Support | | ($101.80) | ($101.80) |
| | PJM Scheduling, System Control and Dispatch Service Refund - Regulation Market Administration | | ($3.77) | ($3.77) |
| | PJM Settlement, Inc. | | $214.02 | $214.02 |
| | Reactive Services | | $14,810.05 | $14,810.05 |
| | Reactive Supply and Voltage Control from Generation and Other Sources Service | | $36,496.89 | $36,496.89 |
| | Real-Time Load Response Charge Allocation | | $278.03 | $278.03 |
| | Regulation and Frequency Response Service | | $14,171.82 | $14,171.82 |
| | Reliability First Corporation (RFC) | | $998.49 | $998.49 |
| | Synchronized Reserve | | $3,293.26 | $3,293.26 |
| | Transmission Enhancement | | $1,419.57 | $1,419.57 |
| | Transmission Owner Scheduling, System Control and Dispatch Service | | $4,880.78 | $4,880.78 |
| **480-8102-592-95-90 Total** | | | **$467,003.95** | **$467,003.95** |
| ⊟480-8102-592-95-91 | Balancing Spot Market Energy | | ($109,579.48) | ($109,579.48) |
| | Balancing Transmission Congestion | | $7,753.83 | $7,753.83 |
| | Balancing Transmission Losses | | ($3,496.73) | ($3,496.73) |
| | Day-ahead Spot Market Energy | | $657,666.39 | $657,666.39 |
| | Day-ahead Transmission Congestion | | $27,869.52 | $27,869.52 |
| | Day-ahead Transmission Losses | | $107,556.45 | $107,556.45 |
| | Inadvertent Interchange | | $1,262.09 | $1,262.09 |
| | Load Reconciliation for Balancing Operating Reserve | | ($9.45) | ($9.45) |
| | Load Reconciliation for Day-ahead Scheduling Reserve | | $30.42 | $30.42 |
| | Load Reconciliation for FERC Annual Recovery | | ($16.14) | ($16.14) |
| | Load Reconciliation for Inadvertent Interchange | | $3.74 | $3.74 |
| | Load Reconciliation for Market Monitoring Unit (MMU) Funding | | ($1.21) | ($1.21) |
| | Load Reconciliation for Non-Synchronized Reserve | | $2.02 | $2.02 |
| | Load Reconciliation for North American Electric Reliability Corporation (NERC) | | ($2.92) | ($2.92) |
| | Load Reconciliation for Organization of PJM States, Inc. (OPSI) Funding | | ($0.21) | ($0.21) |
| | Load Reconciliation for PJM Scheduling, System Control and Dispatch Service | | ($63.08) | ($63.08) |
| | Load Reconciliation for PJM Scheduling, System Control and Dispatch Service Refund | | $1.59 | $1.59 |
| | Load Reconciliation for Reactive Services | | ($1,101.67) | ($1,101.67) |
| | Load Reconciliation for Regulation and Frequency Response Service | | ($18.47) | ($18.47) |
| | Load Reconciliation for Reliability First Corporation (RFC) | | ($4.19) | ($4.19) |
| | Load Reconciliation for Schedule 9-6 - Advanced Second Control Center | | ($8.25) | ($8.25) |
| | Load Reconciliation for Spot Market Energy | | ($3,240.02) | ($3,240.02) |
| | Load Reconciliation for Synchronized Reserve | | $77.54 | $77.54 |
| | Load Reconciliation for Transmission Congestion | | ($959.32) | ($959.32) |
| | Load Reconciliation for Transmission Losses | | ($120.69) | ($120.69) |
| | Load Reconciliation for Transmission Owner Scheduling, System Control and Dispatch Service | | ($22.71) | ($22.71) |
| | Meter Error Correction | | ($5,061.67) | ($5,061.67) |
| **480-8102-592-95-91 Total** | | | **$678,517.38** | **$678,517.38** |
| ⊟480-8102-592-95-92 | Balancing Operating Reserve | ($13,353.61) | | ($13,353.61) |
| | Balancing Spot Market Energy | $193,311.96 | | $193,311.96 |
| | Balancing Transmission Congestion | ($12,036.97) | | ($12,036.97) |
| | Balancing Transmission Losses | $8,885.10 | | $8,885.10 |
| | Day-ahead Operating Reserve | ($390.92) | | ($390.92) |
| | Day-ahead Spot Market Energy | ($565,028.27) | | ($565,028.27) |
| | Day-ahead Transmission Congestion | ($59,277.63) | | ($59,277.63) |
| | Day-ahead Transmission Losses | ($15,380.96) | | ($15,380.96) |
| **480-8102-592-95-92 Total** | | **($463,271.30)** | | **($463,271.30)** |
| ⊟480-8102-592-95-93 | Day-ahead Scheduling Reserve | ($44.71) | | ($44.71) |
| | Generation Resource Rating Test Failure | ($862.43) | | ($862.43) |
| | Reactive Supply and Voltage Control from Generation and Other Sources Service | ($29,467.58) | | ($29,467.58) |
| | Synchronized Reserve | ($997.01) | | ($997.01) |
| | Transmission Losses | ($28,558.39) | | ($28,558.39) |
| **480-8102-592-95-93 Total** | | **($59,930.12)** | | **($59,930.12)** |
| **Grand Total** | | **$ (1,225,548.82)** | **$ 1,928,078.20** | **$702,529.38** |

**FUND SUMMARY as of 07/29/2014**

| | | |
|---|---|---|
| Total Collected | $ | 1,047,214.72 |
| DEMEC Admin Fee Paid | $ | 57,915.35 |
| State Admin Fee Paid | $ | 24,316.32 |
| Customer Grants Paid | $ | 525,863.25 |
| Customer Only Grants/Fees Reserved and Amount Owed | $ | 12,122.50 |
| Community Project Funds Requested - Dov. Lib - Requested | $ | 1,970,000.00 |
| Community Project Funds Paid - Dov. Lib | $ | 298,908.32 |
| Energy Depot Fees Paid | $ | 51,825.38 |
| Efficiency Program Dollars Paid | $ | 37,268.34 |
| Solar Electric Power Association (SEPA) Fee Paid | $ | 6,476.41 |
| Unencumbered Funds Available Grants | **$** | **12,518.84** |
| Funds Available for Dover Library | **$** | **20,000.00** |
| Current Grant Payment Delay (Months) | | **0.0** |

**GRANTS PAID**

| Date Grant Paid | Applicant | Type | Grant Amount Paid | Review Fee Paid | Amount Owed |
|---|---|---|---|---|---|
| 9/21/2007 | Laura Drew Kelly | Geo-Res | $ 3,000.00 | $ 225.00 | $ - |
| 12/5/2007 | Domingo Reyes | PV-Res | $ 12,762.50 | $ 750.00 | $ - |
| 4/16/2008 | Lakeland Commercial Group | Geo-NonRes | $ 10,800.00 | $ 750.00 | $ - |
| 6/19/2008 & 08/25/2008 | L.D. Shank - Triad Farms | PV-NonRes | $ 30,000.00 | $ 750.00 | $ - |
| 10/6/2008 | City of Dover | PV-NonRes | $ 40,820.00 | $ 750.00 | $ - |
| 10/21/2008 | Robert & Cynthia Hartman | Geo-Res | $ 1,800.00 | $ 135.00 | $ - |
| 10/21/2008 | Robert Varipapa | Geo-Res | $ 2,400.00 | $ 180.00 | $ - |
| 2/27/2009 | David Jump | PV-Res | $ 15,000.00 | $ 750.00 | $ - |
| 2/27/2009 | Jakob Seren | PV-Res | $ 15,000.00 | $ 750.00 | $ - |
| 2/27/2009 | William Sweet | PV-Res | $ 15,000.00 | $ 750.00 | $ - |
| 3/31/2009 | LD Shank - Triad Farms | SHW-NonRes | $ 3,000.00 | $ 225.00 | $ - |
| 3/31/2009 | Warren & Joan Seaver | Geo-Res | $ 3,000.00 | $ 225.00 | $ - |
| 4/22/2009 | William Sweet | SHW-Res | $ 3,000.00 | $ 225.00 | $ - |
| 4/28/2009 | State of DE/DNREC - DE National | PV-NonRes | $ 30,000.00 | $ 750.00 | $ - |
| 4/29/2009 | Delaware Primary Care, LLC | PV-NonRes | $ 30,000.00 | $ 750.00 | $ - |
| 9/11/2009 | NCALL | PV-NonRes | $ 30,000.00 | $ 750.00 | $ - |
| 9/11/2009 | D.Brian Beckman | Geo-Res | $ 2,000.00 | $ 150.00 | $ - |
| 9/21/2009 | LSKC Dover, LLC - Kids Cottage | PV-NonRes | $ 29,925.00 | $ 750.00 | $ - |
| 10/5/2009 | Mark F. Boller | Geo-Res | $ 3,000.00 | $ 225.00 | $ - |
| 10/5/2009 | John Welgan | PV-Res | $ 15,000.00 | $ 750.00 | $ - |
| 11/4/2009 | LSKC LLC/ Kids Cottage | Geo-NonRes | $ 12,000.00 | $ 750.00 | $ - |
| 3/25/2010 | James G. McGiffin Jr. & Kathleen | Geo-Res | $ 3,000.000 | $ 225.000 | $ - |
| 3/23/2010 | Minaxi Patel | PV-Res | $ 15,000.000 | $ 750.000 | $ - |
| 5/28/2010 | Nancy Warner | Geo-Res | $ 1,200.000 | $ 90.000 | $ - |
| 6/2/2010 | David Teel | Geo-Res | $ 1,800.000 | $ 135.000 | $ - |
| 6/2/2010 | Dewey J. Barich | Geo-Res | $ 2,400.00 | $ 180.000 | $ - |
| 7/12/2010 | Mike & Sharon Laverty | PV-Res | $ 5,105.000 | $ 382.880 | $ - |
| 8/19/2010 | James Grilli | Geo-Res | $ 1,800.00 | $ 135.000 | $ - |
| 8/19/2010 | Michael Noble | PV-Res | $ 15,000.000 | $ 750.000 | $ - |
| 9/17/2010 | David Teel | PV-Res | $ 7,500.000 | $ 562.500 | $ - |
| 3/8/2011 | Michael & Carol Apgar | PV-Res | $ 7,500.000 | $ 562.500 | $ - |
| 3/17/2011 | Elizabeth Murphey School | Geo-NonRes | $ 9,200.000 | $ 690.000 | $ - |
| 5/24/2011 | Richard Avant | Geo-Res | $ 2,400.000 | $ 180.000 | $ - |
| 6/23/2011 | Charles Messina Plumbing & | SHW-NonRes | $ 10,000.000 | $ 750.000 | $ - |
| 10/4/2011 | Charles Bounds | Geo-Res | $ 1,800.000 | $ 135.000 | $ - |
| 3/29/2011 | Michael J Kopp | Geo-Res | $ 2,300.000 | $ 135.000 | $ 37.500 |
| 7/8/2011 | Psychiatric Access of Central DE | PV-NonRes | $ 13,187.500 | $ 750.000 | $ - |
| 3/7/2012 | Ruth Ann Piper | Geo-Res | $ 1,200.000 | $ 90.00 | $ - |
| 3/7/2012 | Robert Hall | Geo-Res | $ 3,000.000 | $ 225.00 | $ - |
| 3/7/2012 | Elizabeth Murphey School (Bradford | Geo-NonRes | $ 13,800.000 | $ 750.00 | $ - |
| 3/7/2012 | Elizabeth Murphey School (Florence | Geo-NonRes | $ 12,000.000 | $ 750.00 | $ - |
| 3/7/2012 | Elizabeth Murphey School | Geo-NonRes | $ 5,400.000 | $ 405.00 | $ - |
| 3/7/2012 | Elizabeth Murphey School (Garage | Geo-NonRes | $ 1,800.000 | $ 135.00 | $ - |
| 3/7/2012 | Frank Daniels | Geo-Res | $ 4,400.000 | $ 303.75 | $ 26.25 |
| 3/7/2012 | Elizabeth Murphey School (Sanford | Geo-NonRes | $ 10,200.00 | $ 750.00 | $ - |
| 8/15/2012 | Chong S. Tamburo-Lepage | Geo-Res | $ 2,300.00 | $ 172.50 | $ - |
| 12/19/2012 | Christopher W. Los | Geo-Res | $ 3,000.00 | $ 225.00 | $ - |
| 1/30/2013 | Matthew and Kimberly Chesser | Geo-Res | $ 3,000.00 | $ 225.00 | $ - |
| 2/25/2013 | Dennis Ho | PV-Res | $ 6,775.00 | $ 508.13 | $ - |
| 6/28/2013 | John DeMarie | Geo-Res | $ 3,000.00 | $ 225.00 | $ - |
| 10/30/2013 | James and Corinna Fritsch | PV-Res | $ 5,287.50 | $ 396.56 | $ - |
| 10/30/2013 | James and Deri Austin | PV-Res | $ 7,500.00 | $ 562.50 | $ - |
| 2/28/2014 | Calogero Guarraggi | PV-Res | $ 7,500.00 | $ 562.50 | $ - |
| 2/28/2014 | Elizabeth Murphey School | Geo-NonRes | $ 3,700.00 | $ 277.50 | $ - |
| 2/21/2014 | Mohammed Fuad | Geo-Res | $ 3,000.00 | $ - | $ 225.00 |
| 4/8/2014 | Holly Pfeifer | PV-Res | $ 5,750.00 | $ - | $ 431.25 |
| 5/13/2014 | Governors Avenue Animal Hospital | PV-NonRes | $13,550.75 | $ - | $ 750.00 |
| 7/17/2014 | Julia M. Pillsbury | Geo-Res | $ 3,000.00 | $ - | $ 225.00 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | **Total** | **$ 525,863.25** | **$ 24,316.32** | **$ 1,695.00** |

**ARRA RELIEF GRANTS PAID**

| Paid by State | Customer | System Type | Amount |
|---|---|---|---|
| 6/10/2011 | Arturo Sanchez | Solar - PV - Res | $ 7,500.00 |
| 10/19/2011 | John Diamond Enterprise LLC | Solar - PV - Com | $ 30,000.00 |
| 10/19/2011 | John Diamond Enterprise LLC | Geo HP - Com | $ 10,000.00 |
| | | **Total** | **$ 47,500.00** |

**RECEIVED APPLICATIONS**

| Status | Applicant | Type | Grant Reservation Request | Review Fee |
|---|---|---|---|---|
| Approved Pending Completion | Elizabeth Murphey School | Geo - NonRes | $ 3,700.00 | $ 277.50 |
| Approved Pending Completion | Elizabeth Murphey School | Geo - NonRes | $ 3,700.00 | $ 277.50 |
| Approved Pending Completion | Rex Bell | Geo - Res | $ 2,300.00 | $ 172.50 |
| | | | | |
| | | | | |
| | | | | |
| | | **Total** | **$ 9,700.00** | **$ 727.50** |

**ENERGY DEPOT FEES**

| Paid | Fee Period | Amount |
|---|---|---|
| 3/3/2008 | Start-up Fees | $ 5,872.50 |
| 4/15/2008 | Start-up Fees | $ 1,957.50 |
| 4/15/2008 | Mar, Apr, May 2008 | $ 1,692.13 |
| 7/22/2008 | June, July, Aug 2008 | $ 1,692.13 |
| 10/10/2008 | Sept, Oct, Nov 2008 | $ 1,692.13 |
| 1/2/2009 | Dec 08, Jan, Feb 2009 | $ 1,692.13 |
| 4/3/2008 | Mar, Apr, May 2009 | $ 1,692.13 |
| 7/1/2009 | June, July, Aug 2009 | $ 1,692.13 |

**SEPA Fees**

| Date | Measure | Cost |
|---|---|---|
| 3/19/2012 | 2012 Annual Membership | $ 2,158.81 |
| 1/31/2013 | 2013 Annual Membership | $ 2,158.80 |
| 1/24/2014 | 2014 Annual Membership | $ 2,158.80 |
| | | |
| | | |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| 9/11/2009 | Sept, Oct, Nov 2009 | $ 1,692.13 |
| 1/4/2010 | Dec 09, Jan, Feb 2010 | $ 1,692.13 |
| 3/29/2010 | Mar, April, May 2010 | $ 1,692.13 |
| 6/30/2010 | June, July, Aug 2010 | $ 1,692.13 |
| 10/4/2010 | Sept, Oct, Nov 2010 | $ 1,692.13 |
| 1/3/2011 | Dec 2010, Jan, Feb 2011 | $ 1,692.13 |
| 4/5/2011 | Mar, Apr, May 2011 | $ 1,692.13 |
| 7/8/2011 | June, July, Aug 2011 | $ 1,692.13 |
| 10/4/2011 | Sept, Oct, Nov, 2011 | $ 1,692.13 |
| 1/3/2012 | Dec 2011; Jan, Feb 2012 | $ 1,692.13 |
| 4/5/2012 | Mar, Apr, May 2012 | $ 1,692.13 |
| 7/2/2012 | June, July, Aug 2012 | $ 1,692.13 |
| 10/2/2012 | Sept, Oct, Nov 2012 | $ 1,692.13 |
| 11/30/2012 | Dec 12, Jan, Feb 2013 | $ 1,692.13 |
| 2/25/2013 | Mar, Apr, May 2013 | $ 1,692.13 |
| 7/22/2013 | June, July, Aug 2013 | $ 1,692.13 |
| 8/26/2013 | Sept, Oct, Nov, 2013 | $ 1,692.13 |
| 12/3/2013 | Dec 13. Jan, Feb 2014 | $ 1,692.13 |
| 3/4/2014 | Mar, Apr, May 2014 | $ 1,692.13 |
| 6/4/2014 | June, July, Aug 2014 | $ 1,692.13 |
| | Sept, Oct, Nov 2014 | |
| | Dec 14, Jan, Feb 2015 | |
| | **Total Paid** | **$ 51,825.38** |

| | | |
|---|---|---|
| | | |
| | | |
| | | |
| Total | | **$ 6,476.41** |

**ENERGY EFFICIENCY CAMPAIGNS/EDUCATION PROGRAMS**

| Paid | Program Measure | Amount |
|---|---|---|
| 10/21/2008 | 1,500 CFL Campaign & Educational | $ 5,012.29 |
| 12/11/2008 | Reimbursement for Green Energy/Information Pamphlets | $ 3,459.12 |
| 3/31/2009 | Thermal Imager for Home Audits Program | $ 5,581.12 |
| 1/4/2011 | Eco @ Home Energy Conserve. Calendars | $ 20,015.81 |
| 1/14/2014 | Presbyterian Church of Dover - Energy Efficiency Grant | $3,200.00 |
| | **Total** | **$ 37,268.34** |

10/30/2013

**Dover Library Community Funds Collection - $ 1,970,000.00** Allocation change from Dover

| Collections | |
|---|---|
| | |
| $ 5,021.15 | 1/2 of Oct 2009 GEF Payment |
| $ 4,783.94 | 1/2 of Nov 2009 GEF Payment |
| $ 4,813.23 | 1/2 of Dec 2009 GEF Payment |
| $ 5,454.02 | 1/2 of Jan 2010 GEF Payment |
| $ 5,147.49 | 1/2 of Feb 2010 GEF Payment |
| $ 4,897.69 | 1/2 of March 2010 GEF Payment |
| $ 3,976.14 | 1/2 of April 2010 GEF Payment |
| $ 5,638.90 | 1/2 of May 2010 GEF Payment |
| $ 5,645.35 | 1/2 of June 2010 GEF Payment |
| $ 6,590.60 | 1/2 of July 2010 GEF Payment |
| $ 7,786.09 | 1/2 of August 2010 GEF Payment |
| $ 6,415.31 | 1/2 of Sept 2010 GEF Payment |
| $ 5,327.96 | 1/2 of Oct 2010 GEF Payment |
| $ 4,787.73 | 1/2 of Nov 2010 GEF Payment |
| $ 4,939.75 | 1/2 of Dec 2010 GEF Payment |
| $ 5,452.55 | 1/2 of Jan 2011 GEF Payment |
| $ 5,410.35 | 1/2 of Feb 2011 GEF Payment |
| $ 4,646.32 | 1/2 of March 2011 GEF Payment |
| $ 4,742.22 | 1/2 of April 2011 GEF Payment |
| $ 4,702.48 | 1/2 of May 2011 GEF Payment |
| $ 5,664.97 | 1/2 of June 2011 GEF Payment |
| $ 6,430.15 | 1/2 of July 2011 GEF Payment |
| $ 6,916.50 | 1/2 of Aug 2011 GEF Payment |
| $ 6,149.31 | 1/2 of Sept 2011 GEF Payment |
| $ 5,243.92 | 1/2 of Oct 2011 GEF Payment |
| $ 4,829.91 | 1/2 of Nov 2011 GEF Payment |
| $ 4,531.81 | 1/2 of Dec 2011 GEF Payment |
| $ 4,990.50 | 1/2 of Jan 2012 GEF Payment |
| $ 5,071.81 | 1/2 of Feb 2012 GEF Payment |
| $ 4,828.32 | 1/2 of March 2012 GEF Payment |
| $ 4,857.07 | 1/2 of April 2012 GEF Payment |
| $ 4,230.04 | 1/2 of May 2012 GEF Payment |
| $ 5,711.19 | 1/2 of June 2012 GEF Payment |
| $ 6,085.89 | 1/2 of July 2012 GEF Payment |
| $ 7,347.66 | 1/2 of Aug 2012 GEF Payment |
| $ 6,453.66 | 1/2 of Sept 2012 GEF Payment |
| $ 4,886.43 | 1/2 of Oct 2012 GEF Payment |
| $ 4,132.99 | 1/2 of Nov 2012 GEF Payment |
| $ 5,513.86 | 1/2 of Dec 2012 GEF Payment |
| $ 5,187.25 | 1/2 of Jan 2013 GEF Payment |
| $ 5,307.83 | 1/2 of Feb 2013 GEF Payment |
| $ 4,783.25 | 1/2 of March 2013 GEF Payment |
| $ 4,903.40 | 1/2 of April 2013 GEF Payment |
| $ 4,673.21 | 1/2 of May 2013 GEF Payment |
| $ 5,322.04 | 1/2 of June 2013 GEF Payment |
| $ 6,352.74 | 1/2 of July 2013 GEF Payment |
| $ 6,519.11 | 1/2 of Aug 2013 GEF Payment |
| $ 5,995.23 | 1/2 of Sept 2013 GEF Payment |
| $ 4,913.73 | All of Oct 2013 GEF Payment |
| $ 8,589.16 | All of Nov 2013 GEF Payment |
| $ 8,846.64 | All of Dec 2013 GEF Payment |
| $ 9,286.45 | All of Jan 2014 GEF Payment |
| $ 10,267.60 | All of Feb 2014 GEF Payment |
| $ 8,950.89 | All of March 2014 GEF Payment |
| $ 8,960.46 | All of April 2014 GEF Payment |
| $ 8,069.10 | All of May 2014 GEF Payment |
| $ 9,357.61 | All of June 2014 GEF Payment |
| | All of July 2014 GEF Payment |
| | All of Aug 2014 GEF Payment |
| | All of Sept 2014 GEF Payment |
| | All of Oct 2014 GEF Payment |
| | All of Nov 2014 GEF Payment |
| | All of Dec 2014 GEF Payment |
| | All of Jan 2015 GEF Payment |
| | All of Feb 2015 GEF Payment |
| | All of March 2015 GEF Payment |
| **$ 336,340.83** | **Total Collections** |

Allocation Request from Dover 10/30/2013 - DEMEC to direct more money to library

**Dover Library Community Grant Payment Schedule**

| Payment Due Date | Requested Amount | Funds Paid to Date |
|---|---|---|
| 10/17/2011 | $ 48,267.00 | $ 48,267.00 |
| 12/5/2012 | $ 152,141.32 | $ 152,141.32 |
| June 1, 2014 | $ 98,500 | $ 98,500.00 |
| June 1, 2015 | $ 98,500 | |
| June 1, 2016 | $ 98,500 | |
| June 1, 2017 | $ 98,500 | |
| June 1, 2018 | $ 98,500 | |
| June 1, 2019 | $ 98,500 | |
| June 1, 2020 | $ 98,500 | |
| June 1, 2021 | $ 98,500 | |
| June 1, 2022 | $ 98,500 | |
| June 1, 2023 | $ 98,500 | |
| June 1, 2024 | $ 98,500 | |
| June 1, 2025 | $ 98,500 | |
| June 1, 2026 | $ 98,500 | |
| June 1, 2027 | $ 98,500 | |
| June 1, 2028 | $ 98,500 | |
| June 1, 2029 | $ 98,500 | |
| June 1, 2030 | $ 98,500 | |
| June 1, 2031 | $ 98,500 | |
| June 1, 2032 | $ 98,500 | |
| June 1, 2033 | $ 98,500 | |
| **Total** | **$ 1,970,000.00** | **$ 298,908.32** |

**City of Dover**
**Electric Revenue Fund**
**FY14 - White Oak Solar Park Incremental Cost**

| | July | August | September | October | November | December | January | February | March | April | May | June | YTD | Original Budget |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Power Supply & Generation | | | | | | | | | | | | | | |
| Dover Sun Park - Energy | $ 187,421 | $ 176,372 | $ 204,852 | $ 120,839 | $ 99,447 | $ 64,684 | $ 82,605 | $ 101,681 | $ 137,856 | $ 204,781 | $ 206,943 | $ 233,552 | $ 1,821,035 | $ 1,565,800 |
| Dover Sun Park - REC's | 43,005 | 38,516 | 42,894 | 25,307 | 20,875 | 13,583 | 17,301 | 21,304 | 28,882 | 42,751 | 43,323 | - | 337,741 | 300,000 |
| Total Power Supply Cost | 230,426 | 214,888 | 247,746 | 146,146 | 120,322 | 78,267 | 99,906 | 122,985 | 166,738 | 247,532 | 250,266 | 233,552 | 2,158,776 | 1,865,800 |
| Non-Solar Power Supply Cost | (180,227) | (154,545) | (154,590) | (100,770) | (79,066) | (52,006) | (146,406) | (90,909) | (105,944) | (156,611) | (150,227) | (151,061) | (1,522,362) | (1,556,286) |
| Incremental Energy Cost | $ 50,199 | $ 60,343 | $ 93,156 | $ 45,376 | $ 41,256 | $ 26,261 | $ (46,500) | $ 32,077 | $ 60,794 | $ 90,921 | $ 100,039 | $ 82,491 | $ 636,414 | $ 309,514 |
| Revenues | | | | | | | | | | | | | | |
| Customer Sales - Electricity | (9,404) | (7,389) | (7,538) | (7,662) | (7,721) | (8,019) | (8,071) | (7,950) | (7,648) | (7,632) | (8,607) | (9,423) | (97,064) | (26,300) |
| Rent Receipts | (14,446) | - | - | (14,446) | - | - | (14,807) | - | (34,450) | - | (14,807) | - | (92,956) | (58,300) |
| Total Revenues | (23,850) | (7,389) | (7,538) | (22,108) | (7,721) | (8,019) | (22,878) | (7,950) | (42,098) | (7,632) | (23,414) | (9,423) | (190,020) | (84,600) |
| Incremental Sun Park Cost | $ 26,349 | $ 52,954 | $ 85,618 | $ 23,268 | $ 33,535 | $ 18,242 | $ (69,378) | $ 24,127 | $ 18,696 | $ 83,289 | $ 76,625 | $ 73,068 | $ 446,394 | $ 224,914 |
| | | | | | | | | | | | | | | |
| MWh Purchased/Generated - Solar | 2,052.584 | 1,815.656 | 2,000.128 | 1,179.844 | 970.972 | 631.556 | 806.536 | 992.788 | 1,345.984 | 1,999.428 | 2,020.536 | 2,280.340 | 18,096.352 | 18,159.000 |
| MWh $ Solar Energy | $ 91.31 | $ 97.14 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 102.42 | $ 100.63 | $ 86.23 |
| Solar REC's MWh | 307.000 | 272.000 | 300.000 | 177.000 | 146.000 | 95.000 | 121.000 | 149.000 | 202.000 | 299.000 | 303.000 | - | 2,371.000 | |
| MWh $ Solar REC (one month lag)* | $ 140.08 | $ 141.60 | 142.98 | 142.98 | 142.98 | 142.98 | 142.98 | 142.98 | 142.98 | 142.98 | 142.98 | $ - | $ 142.45 | |
| MWh $ Non-Solar Energy | $ 87.81 | $ 85.12 | $ 77.29 | $ 85.41 | $ 81.43 | $ 82.35 | $ 181.52 | $ 91.57 | $ 78.71 | $ 78.33 | $ 74.35 | $ 66.25 | | |

Note: Solar REC's are one month behind due to the time the invoice is received.