Impact of Wintertime SCR/SNCR Optimization on Visibility Impairing Nitrate Precursor Emissions

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MANE-VU Technical Support Committee

# Introduction

During the first planning phase for regional haze, programs that were put in place focused on reducing sulfur dioxide (SO2) emissions. The reductions achieved led to vast improvements in visibility at the MANE-VU Federal Class I Areas due to reduced sulfates formed from SO2 emissions. This resulted in nitrates driving the visibility impairment rather than sulfates in some MANE-VU Class I Areas on the 20% most impaired days, in particular, during the winter months. Nitrogen oxide (NOX) emissions are an important precursor to the formation of nitrates.

Despite the progress made in the first planning period, additional progress is needed to continue to improve visibility. While many hazy days continue to be affected by high sulfate concentrations, many of the most impaired days are now dominated by nitrates, particularly on cooler days, when nitrogen emissions are more likely to contribute to the formation of nitrates rather than participating in the formation of ozone. Therefore, in addition to maintaining reductions already achieved, it is necessary to look closely at the sources of nitrates and the effectiveness of potential controls.

Often Electric Generating Units (EGUs) only run NOX emission controls to comply with ozone season trading programs; consequently, emissions of NOX are uncontrolled during the winter. Controlling winter-time NOx emissions at EGUs using existing controls is generally more cost-effective compared to other sectors that would have to install and bear the capital costs of control equipment solely for improving visibility. We will look at the visibility data and observed emission rates from EGUs with installed selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) controls, and compare those rates to projected emissions, to show the improvements that can be made to visibility impairment from running existing SCR and SNCR during the winter months.

# Current Visibility Data

Figure 1 through Figure 5 show the variability in which meteorological seasons contained “20% most impaired days”[[1]](#footnote-2) from 2000 to 2015. The Edwin B. Forsythe National Wildlife Refuge (hereafter Brigantine Wilderness) has the strongest increase in winter 20% most impaired days, followed by Acadia National Park and Great Gulf Wilderness Area. The only site that did not see an increase in the number of winter 20% most impaired days was Lye Brook, but this is likely due to the fact that the Lye Brook IMPROVE monitor was moved in 2012 and the 20% most impaired days were not calculated as of this writing for the new site. When you look at 20% most impaired days you also see an upward trend in the number of winter days. This shows that emissions that affect visibility during colder months are important to consider when developing control strategies, particularly for Brigantine.

Figure 1: Trends in seasonality of 20% most impaired days at Acadia National Park

Figure 2: Trends in seasonality of 20% most impaired days at Moosehorn NWR

Figure 3: Trends in seasonality of 20% most impaired days at Lye Brook Wilderness

Figure 4: Trends in seasonality of 20% most impaired days at Great Gulf Wilderness

Figure 5: Trends in seasonality of 20% most impaired days at Brigantine Wilderness

Class I area plots were also created showing light extinction speciation for each day for 2002, 2011, and 2015 (Figure 6 through Figure 10). For all the Class I areas, there is a significant decrease in light extinction from 2002 to 2011 (especially from sulfates contribution) and a smaller decrease from 2011 to 2015. At Lye Brook and Brigantine, nitrates contribute to a greater percentage of visibility impairment on certain days.

Figure 6: Acadia National Park 2002/2011/2015 Speciation Comparison

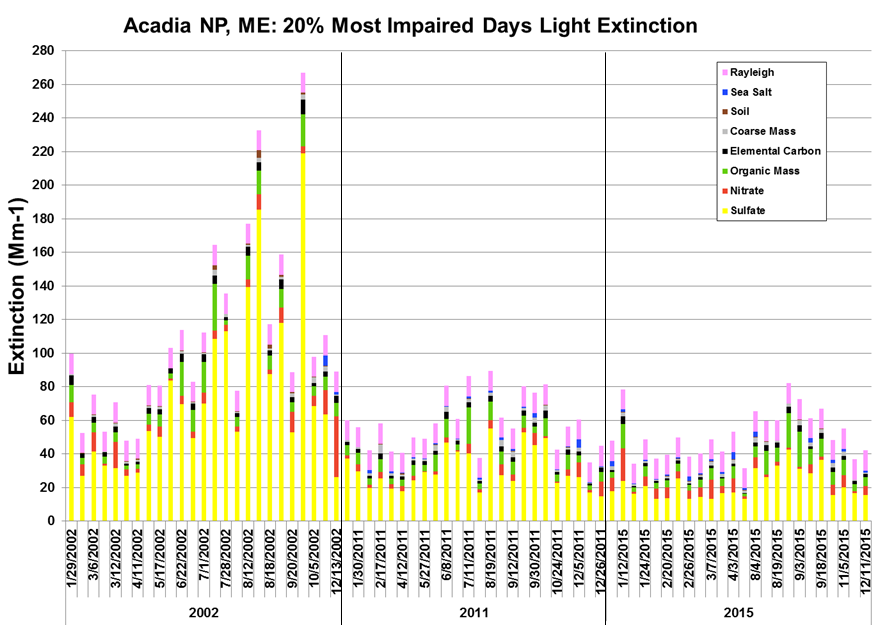


Figure 7: Moosehorn Wilderness 2002/2011/2015 Speciation Comparison

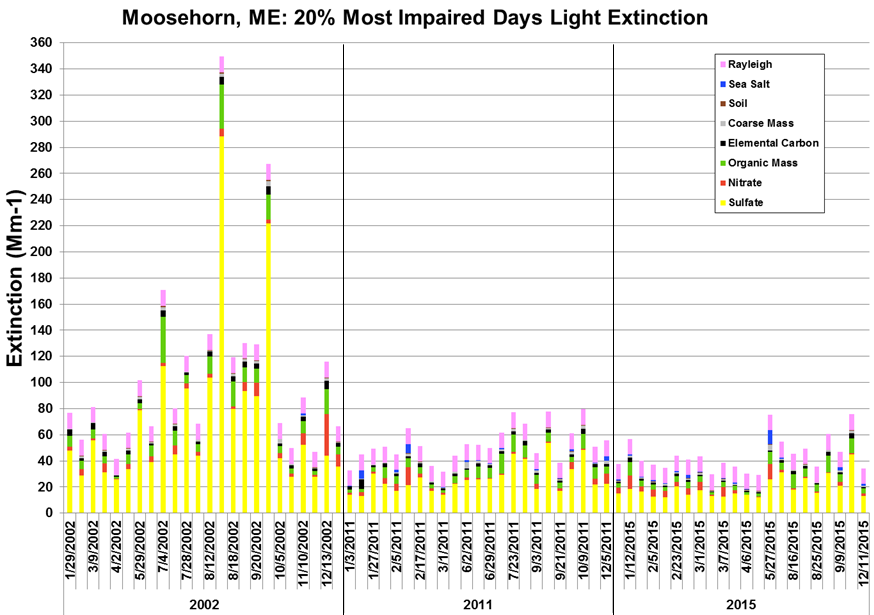


Figure 8: Great Gulf Wilderness 2002/2011/2015 Speciation Comparison



Figure 9: Lye Brook Wilderness 2011/2015 Speciation Comparison

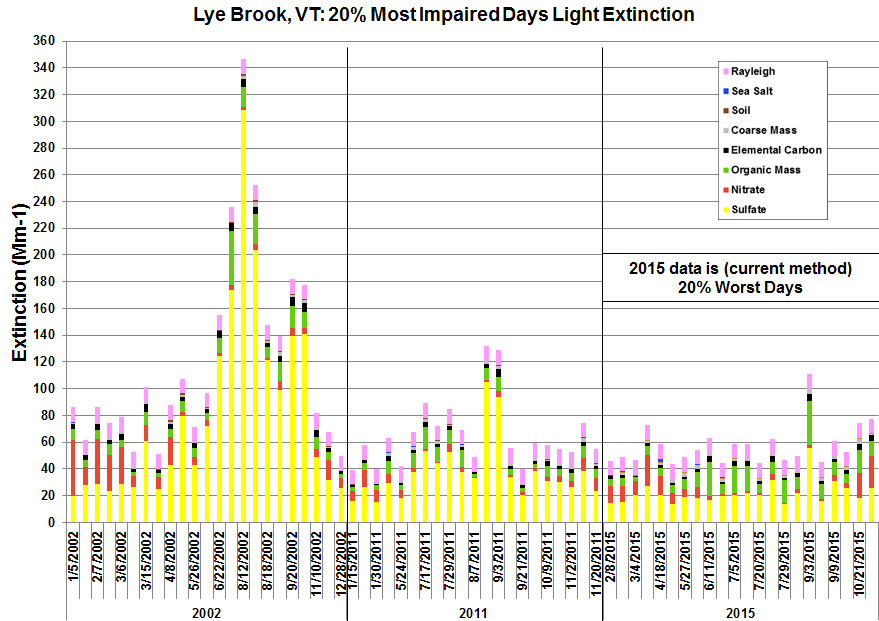


Figure 10: Brigantine Wilderness 2002/2011/2015 Speciation Comparison

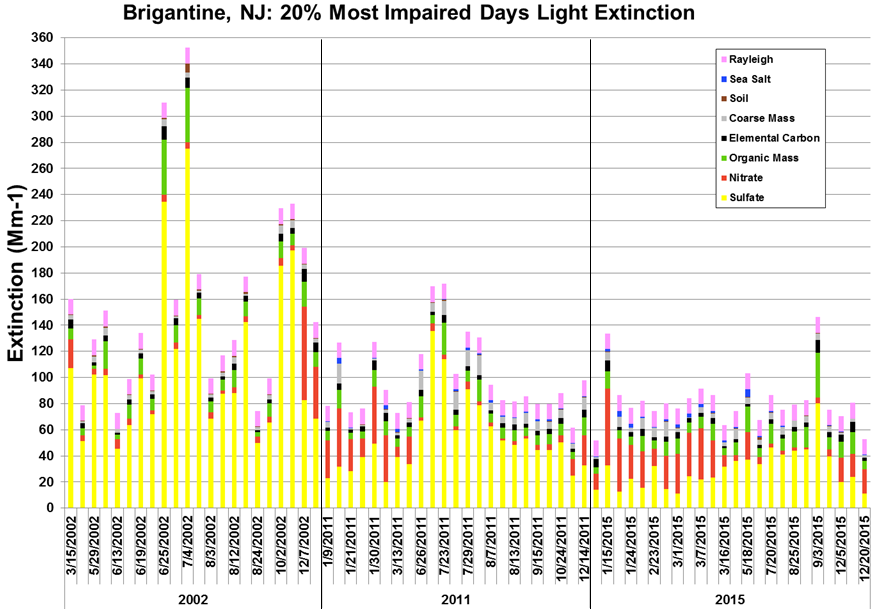


Table 1 demonstrates these trends between 2000 and 2015. At Brigantine, starting in 2007, at least half of the 20% most impaired days in each winter has had more extinction from nitrates than sulfates. In 11 winters out of 15 (73%) in the 2000-2015 period, Brigantine had days in which nitrates contributed more than sulfates to light extinction. At Lye Brook, in the same period, 6 winters (i.e., 43%) had some days in which nitrates contributed more than sulfates to light extinction, and more than half of the 20% most impaired days in 4 of these winters had more extinction from nitrates than sulfates. It is rare (less than 5%) for the other three Class I areas to have winter days where there is more extinction from nitrates than sulfates.

Focusing in on Lye Brook and Brigantine in more detail, one can see in Figure 11 and Figure 12 for Lye Brook and Figure 13 and Figure 14 for Brigantine that during the winter months the back trajectories on many of the 20% most impaired days traverse the southwestern states in MANE-VU, the states in LADCO and the northern most states in SESARM. Later we will see how this information compares with the locations of EGUs that could impact MANE-VU Class I Areas.

Table 1: Number of 20% most impaired winter days and winter days where nitrate extinction was greater than sulfate at each monitored Class I area\*

| Site | Year | Winter Days | NO3 > SO4 | % | Site | Year | Winter Days | NO3 > SO4 | % |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Acadia | 2000 | 3 | 0 | 0% | *Great Gulf* | 2007 | 3 | 0 | 0% |
| 2001 | 6 | 0 | 0% | 2008 | 6 | 0 | 0% |
| 2002 | 3 | 1 | 33% | 2011 | 7 | 0 | 0% |
| 2003 | 3 | 0 | 0% | 2012 | 3 | 0 | 0% |
| 2004 | 4 | 0 | 0% | 2013 | 7 | 1 | 14% |
| 2005 | 6 | 0 | 0% | 2014 | 6 | 0 | 0% |
| 2006 | 6 | 0 | 0% | 2015 | 8 | 0 | 0% |
| 2007 | 2 | 0 | 0% | *Lye Brook* | 2000 | 2 | 0 | 0% |
| 2008 | 1 | 0 | 0% | 2001 | 2 | 1 | 50% |
| 2009 | 3 | 0 | 0% | 2002 | 6 | 3 | 50% |
| 2010 | 4 | 0 | 0% | 2003 | 3 | 0 | 0% |
| 2011 | 7 | 0 | 0% | 2005 | 0 | 0 | 0% |
| 2012 | 5 | 0 | 0% | 2006 | 1 | 0 | 0% |
| 2013 | 7 | 0 | 0% | 2007 | 3 | 0 | 0% |
| 2014 | 11 | 1 | 9% | 2009 | 1 | 1 | 100% |
| 2015 | 10 | 0 | 0% | 2010 | 3 | 0 | 0% |
| Brigantine | 2000 | 4 | 1 | 25% | 2011 | 6 | 0 | 0% |
| 2001 | 6 | 1 | 17% | 2012W | 5 | 4 | 80% |
| 2002 | 2 | 0 | 0% | 2013W | 8 | 1 | 13% |
| 2003 | 2 | 1 | 50% | 2014W | 7 | 3 | 43% |
| 2004 | 1 | 1 | 100% | 2015W | 3 | 0 | 0% |
| 2005 | 4 | 0 | 0% | *Moosehorn* | 2000 | 4 | 0 | 0% |
| 2006 | 3 | 0 | 0% | 2001 | 5 | 0 | 0% |
| 2007 | 1 | 0 | 0% | 2002 | 3 | 0 | 0% |
| 2009 | 9 | 3 | 33% | 2003 | 4 | 1 | 25% |
| 2010 | 8 | 5 | 63% | 2004 | 4 | 0 | 0% |
| 2011 | 7 | 3 | 43% | 2005 | 7 | 0 | 0% |
| 2012 | 7 | 4 | 57% | 2006 | 6 | 0 | 0% |
| 2013 | 10 | 5 | 50% | 2007 | 3 | 0 | 0% |
| 2014 | 11 | 7 | 64% | 2008 | 3 | 0 | 0% |
| 2015 | 10 | 6 | 60% | 2009 | 4 | 0 | 0% |
| Great Gulf | 2001 | 4 | 0 | 0% | 2010 | 5 | 0 | 0% |
| 2002 | 3 | 0 | 0% | 2011 | 9 | 0 | 0% |
| 2003 | 3 | 0 | 0% | 2012 | 5 | 0 | 0% |
| 2004 | 2 | 0 | 0% | 2013 | 4 | 0 | 0% |
| 2005 | 5 | 0 | 0% | 2014 | 7 | 0 | 0% |
| 2006 | 5 | 0 | 0% | 2015 | 8 | 0 | 0% |

\*Notes  
1. Data was not available for Great Gulf in 2000, 2009, 2010, or at Lye Brook in 2004  
2. The location of the Lye Brook monitor changed from 2011 to 2012, though several months of contemporaneous monitoring results were collected for both sites and the measurements were found to be comparable. Also as a result, 20% most impaired days are not available from 2012 on so 20% worst days were used for those years and are marked with a W.

|  |  |
| --- | --- |
| Figure 11: Trajectory analyses of Lye Brook Wilderness 20% most impaired days during Winter/Spring 2011 | Figure 12: Trajectory analyses of Lye Brook Wilderness 20% most impaired days during Winter 2015 |
| Figure 13: Trajectory analyses of Brigantine 20% most impaired days during Winter 2011 | Figure 14: Trajectory analyses of Brigantine 20% most impaired days during Winter 2015 |

Figure 15: Sources of NOX emissions in the Eastern United States based on 2011 and 2018 Alpha 2 inventory

# Sources of Anthropogenic NOX Emissions

Given that regulation of NOX emission sources is typically the more cost-effective approach to reducing precursors of nitrates, the next step is to determine which sources produce the emissions that need to be reduced. When looking at the NOX emissions inventory for both 2011 and 2018 (Figure 15) one sees that for each RPO in the Eastern United States, EGUs (highlighted) are among the top two most important NOX–emitting source sectors.[[2]](#footnote-3)

However, the focus of the analysis is not on heavy-duty vehicles or mobile sources in total, which do have a large overall contribution.  As described below, the reasons for this are regulatory and scientific in nature.

First, states have very little regulatory authority to address mobile sources.  The Clean Air Act under Section 209 preempts individual states outside of California from adopting differing emissions standards and lower emissions standards are by far the most effective way to address NOX emissions from mobile sources.  Emissions standards for light duty vehicles were also recently lowered under the Tier 3 regulations[[3]](#footnote-4) and many states in MANE-VU already have adopted the most recent California Low Emission Vehicle standards.  Additionally, as of this writing, the most recent petition from the South Coast Air Quality Management District to tighten emission standards from heavy-duty vehicles, which many MANE-VU members have signed onto, has not yet been acted upon by EPA. [[4]](#footnote-5)

Second, emissions from mobile and area sources are emitted close to ground level, which results in high levels of dry deposition and a lack of mixing and transport, whereas emissions from EGUs are released from tall stacks resulting in higher levels of vertical atmospheric mixing, a greater amount of pollution forming secondary organic aerosols, and more extensive pollution transport. [[5]](#footnote-6),[[6]](#footnote-7)  This implies that NOx emissions from EGUs will likely have a wider range of impact on the formation of visibility impairing particulates in the mostly rural Class I areas in the eastern part of MANE-VU than NOx emissions from other types of distant sources that emit at ground level, such as mobile sources.  However, the exclusion of mobile sources in this analysis should not imply that locally emitted NOx from mobile sources, particularly heavy-duty vehicles, should not be considered for analysis and control.

Third, running existing controls on EGUs has been found to be possibly the most cost effective way to control NOX emissions.  In particular, EPA found that a reasonable cost to restart an idled SCR on a coal-fired EGU would be $1,400 per ton of NOX removed and $3,400 per ton of NOX removed to restart an idled SNCR. [[7]](#footnote-8),[[8]](#footnote-9)  EPA found that retrofitting existing coal-fired EGUs with SCR would be $5,000 and SNCR would be $6,400 per ton of NOX removed.[[9]](#footnote-10)

For all of these reasons, focusing on running controls on EGUs to reduce the impact of nitrates on visibility impairment during the colder months is the most reasonable approach that should be considered.

# Emission Rate Processing

Maryland Department of Environment conducted an ozone season analysis in order to determine the emission benefits that could be achieved if coal-fired EGUs ran their already installed NOX controls at the best observed ozone season emission rates found by examining hourly emissions data from CAMD during the period 2005-2012.[[10]](#footnote-11) Due to the fact that the primary factor in reducing the effectiveness of NOX emission controls is flue gas temperature rather than the ambient temperature, any properly configured control system would not see a decrease in effectiveness during the winter months. Therefore, the best observed ozone season emission rates were assumed to be achievable during non-ozone season months as well. However, we determined it was not appropriate to use the best observed non-ozone season emissions rates in this analysis because the expectation was that controls would not necessarily be run to the same extent as during the ozone season since the same regulatory drivers, namely the ozone season NOX trading programs, are not in place in the winter time.

States have developed the ERTAC EGU projection tool[[11]](#footnote-12) in order to project future year EGU emissions, and this tool is being used in development of base case 2011 and future case 2028 EGU emissions inventories for regional haze planning. ERTAC EGU projection tool requires several sets of inputs, including a file to adjust future emission rates due to changes in operations, installation of controls, etc.

The version of future case regional haze modeling that was completed prior to writing this paper used the Alpha 2 inventory, which included ERTAC EGU v2.3 projections for the sector.[[12]](#footnote-13) ERTAC EGU v2.6 projections have become available now, but have not yet been included in a modeling inventory used for regional haze.[[13]](#footnote-14)

To estimate the impacts of optimizing controls during the winter, the best observed rates were processed for inclusion in the ERTAC EGU control file, and then, ERTAC EGU v2.6 was rerun with the new control file.[[14]](#footnote-15) Full details of the creation of the control file and the data in the control file are found in Appendix A.

# Results

NOX emissions were projected using ERTAC and the emissions were compared for the time period from January 1 – April 30 and November 1 – December 31, the time period considered the non-ozone season. Results are being compared for v2.3 and v2.6 base cases to show the impact of recent updates to ERTAC inputs that had not yet been included in regional haze modeling, and then, the original v2.6 results are compared to the run where the best observed rates were applied.

We found that states in the four eastern RPOs would see a drop of NOX emissions from ~680,000 tons to ~570,000 tons (17%) from upgrading the ERTAC inputs to the most recent version and a further drop to ~460,000 tons (19%) when best observed rates were applied during non-ozone season i.e., approximate reductions of 644 and 588 tons per day respectively. Full state level data for the three scenarios are written out in Table 2 and depicted visually in Figure 16.

Table 2: Total 2028 Projected NOX Emissions from January 1-April 30 and November 1-December 31

| RPO | State | v2.3 Base | v2.6 Base | | Non-OS Best Observed Rate Run | |
| --- | --- | --- | --- | --- | --- | --- |
| Tons | % Change | Tons | % Change |
| **MANE-VU** | CT | 775.29 | 461.09 | -41% | 461.09 | 0% |
| DE | 502.14 | 823.25 | 64% | 750.85 | -9% |
| MA | 1,835.84 | 732.11 | -60% | 732.11 | 0% |
| MD | 11,413.70 | 10,090.07 | -12% | 5,364.26 | -47% |
| ME | 221.39 | 301.93 | 36% | 301.93 | 0% |
| NH | 2,259.36 | 1,145.80 | -49% | 744.55 | -35% |
| NJ | 2,128.34 | 2,094.81 | -2% | 1,984.44 | -5% |
| NY | 8,451.07 | 5,774.96 | -32% | 5,774.96 | 0% |
| PA | 53,119.05 | 33,944.72 | -36% | 22,983.84 | -32% |
| RI | 285.15 | 399.09 | 40% | 399.09 | 0% |
| VT | 0.00 | 0.00 | n/a | 0.00 | n/a |
| **SubTotal** | **80,991.33** | **55,767.83** | **-31%** | **39,497.13** | **-29%** |
| **LADCO** | IL | 25,278.91 | 20,513.97 | -19% | 18,833.81 | -8% |
| IN | 40,244.31 | 40,744.75 | 1% | 30,610.74 | -25% |
| MI | 26,555.70 | 16,895.08 | -36% | 14,423.45 | -15% |
| MN | 11,479.65 | 10,507.00 | -8% | 9,783.55 | -7% |
| OH | 47,677.24 | 40,322.69 | -15% | 23,972.69 | -41% |
| WI | 7,391.24 | 9,063.61 | 23% | 8,553.87 | -6% |
| **SubTotal** | **158,627.06** | **138,047.09** | **-13%** | **106,178.11** | **-23%** |
| **SESARM** | AL | 24,030.43 | 15,971.11 | -34% | 9,375.48 | -41% |
| FL | 23,267.30 | 19,836.10 | -15% | 17,400.53 | -12% |
| GA | 24,124.89 | 20,838.31 | -14% | 8,446.12 | -59% |
| KY | 47,495.97 | 40,399.53 | -15% | 34,038.75 | -16% |
| MS | 11,993.68 | 8,770.10 | -27% | 8,770.10 | 0% |
| NC | 23,677.82 | 15,627.62 | -34% | 9,342.11 | -40% |
| SC | 7,846.05 | 5,179.90 | -34% | 4,083.11 | -21% |
| TN | 8,694.57 | 4,701.55 | -46% | 3,995.52 | -15% |
| VA | 11,633.30 | 8,153.29 | -30% | 7,223.11 | -11% |
| WV | 31,772.17 | 27,911.72 | -12% | 17,008.50 | -39% |
| **SubTotal** | **214,536.17** | **167,389.23** | **-22%** | **119,683.34** | **-28%** |
| **CENSARA** | AR | 24,037.76 | 23,649.35 | -2% | 22,785.88 | -4% |
| IA | 15,515.11 | 11,339.70 | -27% | 11,255.79 | -1% |
| KS | 11,627.70 | 14,217.40 | 22% | 10,894.90 | -23% |
| LA | 19,305.77 | 19,915.40 | 3% | 19,592.73 | -2% |
| MO | 38,098.39 | 32,829.95 | -14% | 28,251.82 | -14% |
| NE | 23,692.60 | 21,976.01 | -7% | 21,854.81 | -1% |
| OK | 29,303.74 | 17,253.89 | -41% | 17,253.89 | 0% |
| TX | 68,748.74 | 65,509.54 | -5% | 64,212.87 | -2% |
| **SubTotal** | **230,329.82** | **206,691.25** | **-10%** | **196,102.68** | **-5%** |
| **Grand Total** | | **684,484.38** | **567,895.40** | **-17%** | **461,461.26** | **-19%** |

Figure 16: Total 2028 Projected NOX Emissions from January 1-April 30 and November 1-December 31

Figure 17 shows the change in non-ozone season emissions that occur when ERTAC inputs are changed from version 2.3 to 2.6. Figure 18 shows the change in non-ozone season emissions that occur when best observed rates are used during the non-ozone season months.

Figure 18 also shows which back trajectories occurred on days where nitrate impairment outweighs the sulfate impairment at Brigantine. Many of the back trajectories on the 20% most impaired days traverse the locations of the EGUs that are seeing some of the greatest reductions in emissions in the analysis. You can clearly see emission reductions occurring at power plants in Pennsylvania, Michigan, and along the Ohio River valley. Since the emissions from these power plants are released into air masses that are likely to travel to Brigantine, these emissions reductions should have a significant benefit at Brigantine. One should note that the back trajectories were not run at an elevation intended to evaluate against mobile and area sources and were not run for a long enough time period to demonstrate impacts from further away states such as Texas. The complete list of sources is provided in Appendix B.

Figure 17: Change in non-OS NOX emissions (tons) due to migration from ERTAC v2.3 to v2.6

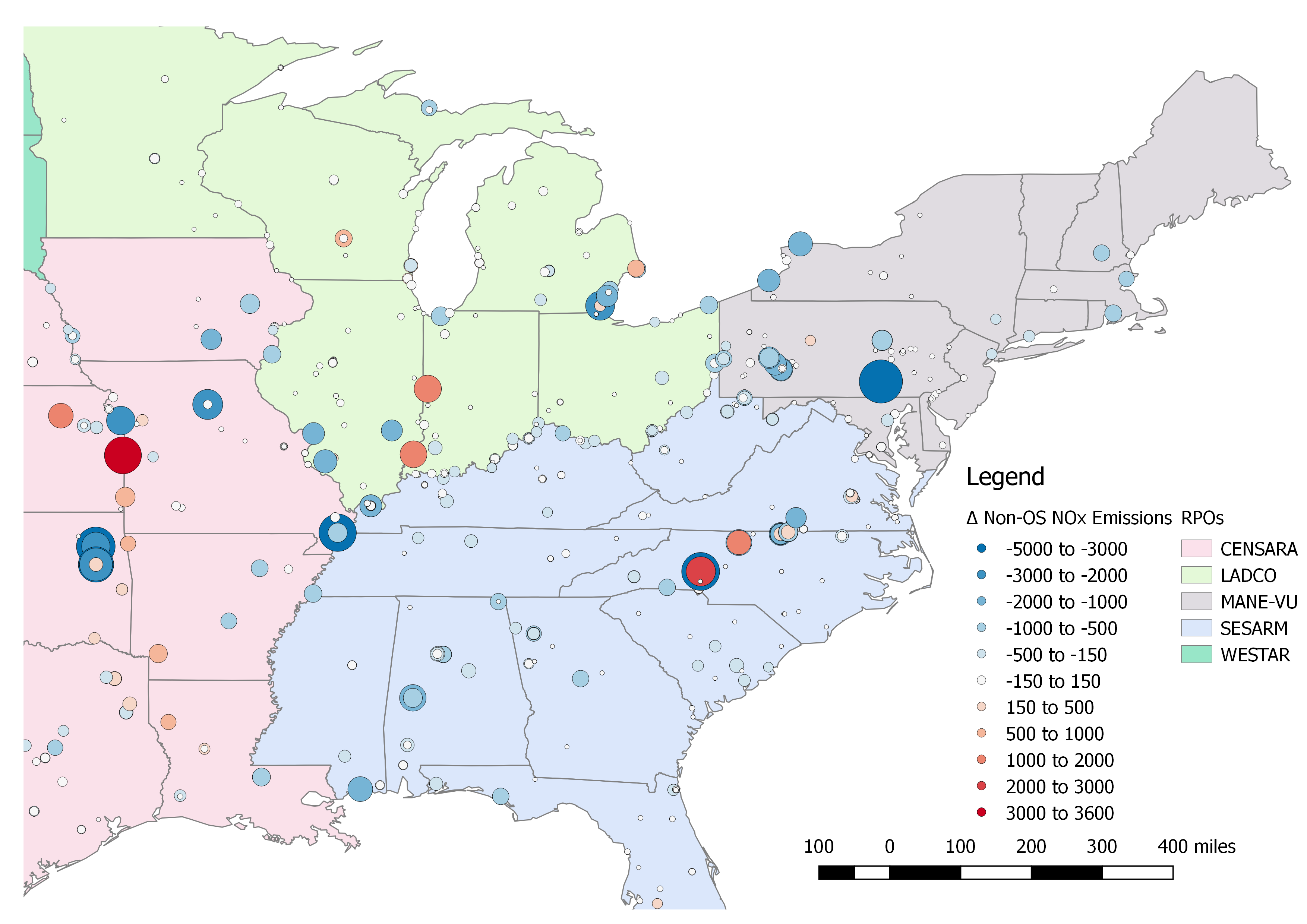
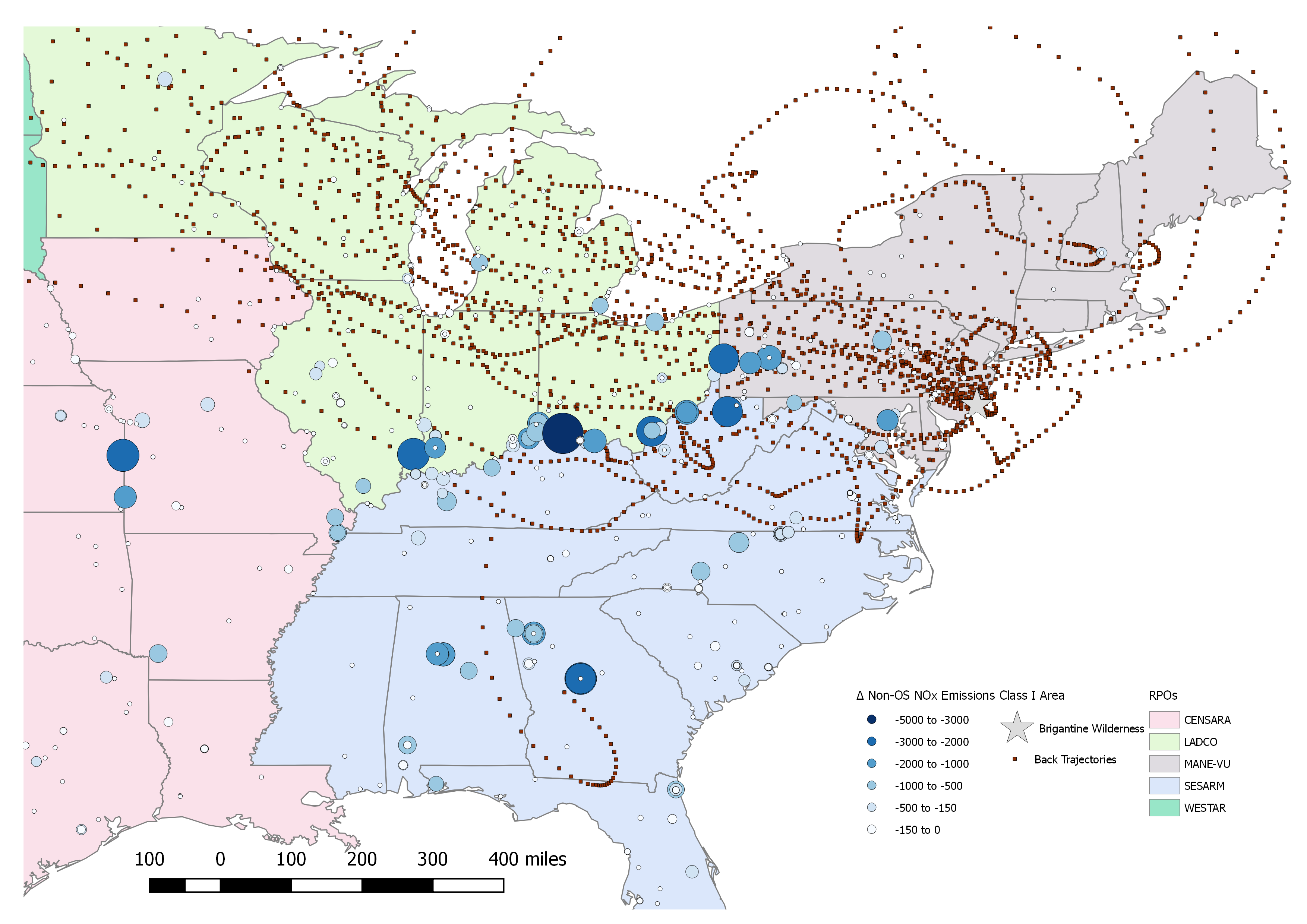


Figure 18: Change in non-OS NOX emissions (tons) due to optimization of non-OS emission rates and 2011 and 2015 back trajectories on 20% most impaired winter days where nitrates impacted visibility more than sulfates at Brigantine Wilderness



# Summary

In recent years several MANE-VU Class I Areas have seen an increase in the relative visibility impairment from nitrates during the colder months. NOX emissions are one of the main anthropogenic precursors to wintertime nitrate formation. Due to the higher elevation at which EGUs release emissions, NOX emissions from EGUs have more potential to impact distant Class I Areas than other types of NOX emission sources. Running existing installed controls is considered to be one of the most cost-effective ways to control NOX emissions from EGUs. The analysis presented in this report demonstrates that running existing SCRs and SNCRs on EGUs would substantially reduce the NOX emissions that lead to visibility impairment during the winter from nitrates.

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# Appendix A

In order to create the control file, the annual summary file and preprocessed control file files from the ERTAC v2.6 and the best observed rate file were imported into Microsoft Access. The preprocessed control file was used since it included already processed seasonal controls, which are in a separate input file. Then, the best ozone season NOX emission rate was compared to the non-ozone season NOX emission rate from the annual summary file. In cases where the best observed ozone season NOX emission rate at a unit with an installed SCR or SNCR was lower than the non-ozone season NOX emission rate found in the annual summary an emission rate entry was added to the control file reflecting the best observed rate. Entries in the existing control emissions file for NOX emissions for units that met the criteria were removed (156 entries) and then new NOX emission rates were appended (291 entries). It should be noted that not all units have a control file entry since many units rely on the base year emission rates solely in ERTAC. The replacement ertac\_control\_emissions.csv file was then run through ERTAC EGU, using all other inputs directly from the 2028 projections for ERTAC v2.6, except ertac\_seasonal\_controls.csv, which was not needed for the run due to its inclusion in ertac\_control\_emissions.csv. The entries added to the final control file are in Table 3 below.

Table 3: Entries added to ERTAC Control File

| ORISPL Code | Unit ID | Factor Start Date | Factor End Date | Pollutant | Emission Rate | Control Efficiency | Best Observed Rate Year |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1004 | CTG1 | 1/1/2028 | 12/31/2028 | NOX | 0.0443 |  | 2014 |
| 1004 | CTG2 | 1/1/2028 | 12/31/2028 | NOX | 0.0522 |  | 2014 |
| 10043 | 1001 | 1/1/2028 | 12/31/2028 | NOX | 0.1009 |  | 2015 |
| 10075 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1172 |  | 2014 |
| 10075 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1215 |  | 2014 |
| 1012 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1482 |  | 2015 |
| 1012 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0885 |  | 2015 |
| 10151 | 1A | 1/1/2028 | 12/31/2028 | NOX | 0.0721 |  | 2005 |
| 10566 | 1001 | 1/1/2028 | 12/31/2028 | NOX | 0.1218 |  | 2009 |
| 10566 | 1002 | 1/1/2028 | 12/31/2028 | NOX | 0.1143 |  | 2011 |
| 10641 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0945 |  | 2005 |
| 10641 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0949 |  | 2006 |
| 10678 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.051 |  | 2008 |
| 1082 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0537 |  | 2010 |
| 1241 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.081 |  | 2011 |
| 1241 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0908 |  | 2015 |
| 130 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0664 |  | 2014 |
| 130 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0702 |  | 2012 |
| 130 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.059 |  | 2012 |
| 130 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0591 |  | 2012 |
| 1356 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0448 |  | 2005 |
| 1356 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0272 |  | 2005 |
| 1356 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0272 |  | 2005 |
| 136 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0434 |  | 2010 |
| 136 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0404 |  | 2011 |
| 1364 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.045 |  | 2005 |
| 1364 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0374 |  | 2007 |
| 1374 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1229 |  | 2006 |
| 1374 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.2179 |  | 2005 |
| 1378 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.1001 |  | 2005 |
| 1382 | H1 | 1/1/2028 | 12/31/2028 | NOX | 0.0606 |  | 2007 |
| 1382 | H2 | 1/1/2028 | 12/31/2028 | NOX | 0.0666 |  | 2009 |
| 1552 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.2783 |  | 2015 |
| 1552 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.2351 |  | 2015 |
| 1554 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.2222 |  | 2015 |
| 1554 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0552 |  | 2015 |
| 1571 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.104 |  | 2014 |
| 1571 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1927 |  | 2009 |
| 1572 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.2197 |  | 2015 |
| 1572 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.2212 |  | 2015 |
| 1572 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.2178 |  | 2015 |
| 1573 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0251 |  | 2013 |
| 1573 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0309 |  | 2011 |
| 1702 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0488 |  | 2015 |
| 1702 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0443 |  | 2015 |
| 1710 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0366 |  | 2015 |
| 1710 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0414 |  | 2015 |
| 1733 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.038 |  | 2014 |
| 1733 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0573 |  | 2011 |
| 1733 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0408 |  | 2013 |
| 1893 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1708 |  | 2014 |
| 1893 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1714 |  | 2014 |
| 1893 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.05 |  | 2010 |
| 1893 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.1057 |  | 2015 |
| 207 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1265 |  | 2010 |
| 207 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1274 |  | 2010 |
| 2076 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0918 |  | 2009 |
| 2079 | 5A | 1/1/2028 | 12/31/2028 | NOX | 0.0718 |  | 2012 |
| 2094 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.3413 |  | 2013 |
| 2094 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.4161 |  | 2013 |
| 2094 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0787 |  | 2010 |
| 2167 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0895 |  | 2008 |
| 2167 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0941 |  | 2009 |
| 2168 | MB1 | 1/1/2028 | 12/31/2028 | NOX | 0.0958 |  | 2010 |
| 2168 | MB2 | 1/1/2028 | 12/31/2028 | NOX | 0.115 |  | 2015 |
| 2168 | MB3 | 1/1/2028 | 12/31/2028 | NOX | 0.0961 |  | 2010 |
| 2364 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1613 |  | 2005 |
| 2364 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.159 |  | 2006 |
| 2367 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.1811 |  | 2007 |
| 2367 | 6 | 1/1/2028 | 12/31/2028 | NOX | 0.1896 |  | 2007 |
| 2403 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0745 |  | 2011 |
| 2408 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0731 |  | 2015 |
| 2408 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0544 |  | 2015 |
| 26 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.076 |  | 2007 |
| 2712 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.084 |  | 2005 |
| 2712 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0575 |  | 2011 |
| 2712 | 3A | 1/1/2028 | 12/31/2028 | NOX | 0.0742 |  | 2005 |
| 2712 | 3B | 1/1/2028 | 12/31/2028 | NOX | 0.0756 |  | 2005 |
| 2712 | 4A | 1/1/2028 | 12/31/2028 | NOX | 0.0793 |  | 2009 |
| 2712 | 4B | 1/1/2028 | 12/31/2028 | NOX | 0.0793 |  | 2009 |
| 2718 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.1778 |  | 2008 |
| 2718 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.1912 |  | 2012 |
| 2721 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.056 |  | 2011 |
| 2721 | 6 | 1/1/2028 | 12/31/2028 | NOX | 0.0457 |  | 2013 |
| 2727 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.196 |  | 2010 |
| 2727 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1956 |  | 2010 |
| 2727 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0679 |  | 2009 |
| 2727 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.2008 |  | 2008 |
| 2828 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0348 |  | 2009 |
| 2828 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0426 |  | 2009 |
| 2828 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0226 |  | 2007 |
| 2832 | 7 | 1/1/2028 | 12/31/2028 | NOX | 0.0536 |  | 2007 |
| 2832 | 8 | 1/1/2028 | 12/31/2028 | NOX | 0.054 |  | 2007 |
| 2836 | 12 | 1/1/2028 | 12/31/2028 | NOX | 0.2842 |  | 2013 |
| 2840 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0546 |  | 2010 |
| 2850 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0939 |  | 2009 |
| 2850 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0961 |  | 2006 |
| 2850 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.1078 |  | 2015 |
| 2866 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.1058 |  | 2012 |
| 2866 | 7 | 1/1/2028 | 12/31/2028 | NOX | 0.1019 |  | 2014 |
| 2876 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0788 |  | 2005 |
| 2876 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0792 |  | 2005 |
| 2876 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0787 |  | 2005 |
| 2876 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0786 |  | 2005 |
| 2876 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0785 |  | 2005 |
| 3 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.2262 |  | 2008 |
| 3 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0603 |  | 2010 |
| 3122 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0667 |  | 2006 |
| 3122 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0826 |  | 2006 |
| 3122 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0872 |  | 2005 |
| 3130 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0747 |  | 2014 |
| 3130 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0745 |  | 2012 |
| 3136 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0431 |  | 2006 |
| 3136 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0433 |  | 2008 |
| 3149 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0581 |  | 2006 |
| 3149 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0578 |  | 2006 |
| 3297 | WAT1 | 1/1/2028 | 12/31/2028 | NOX | 0.0601 |  | 2007 |
| 3297 | WAT2 | 1/1/2028 | 12/31/2028 | NOX | 0.0541 |  | 2006 |
| 3298 | WIL1 | 1/1/2028 | 12/31/2028 | NOX | 0.0601 |  | 2005 |
| 3396 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0618 |  | 2009 |
| 3399 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0588 |  | 2009 |
| 3399 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0609 |  | 2014 |
| 3407 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0498 |  | 2009 |
| 3407 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0501 |  | 2007 |
| 3407 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0504 |  | 2007 |
| 3407 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0501 |  | 2007 |
| 3407 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0486 |  | 2007 |
| 3407 | 6 | 1/1/2028 | 12/31/2028 | NOX | 0.0448 |  | 2006 |
| 3407 | 7 | 1/1/2028 | 12/31/2028 | NOX | 0.0447 |  | 2006 |
| 3407 | 8 | 1/1/2028 | 12/31/2028 | NOX | 0.0448 |  | 2006 |
| 3407 | 9 | 1/1/2028 | 12/31/2028 | NOX | 0.0449 |  | 2006 |
| 3470 | WAP5 | 1/1/2028 | 12/31/2028 | NOX | 0.0383 |  | 2007 |
| 3470 | WAP6 | 1/1/2028 | 12/31/2028 | NOX | 0.0394 |  | 2007 |
| 3470 | WAP7 | 1/1/2028 | 12/31/2028 | NOX | 0.036 |  | 2007 |
| 3470 | WAP8 | 1/1/2028 | 12/31/2028 | NOX | 0.0363 |  | 2006 |
| 3497 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1261 |  | 2015 |
| 3497 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1305 |  | 2013 |
| 3797 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0487 |  | 2014 |
| 3797 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0309 |  | 2008 |
| 3797 | 6 | 1/1/2028 | 12/31/2028 | NOX | 0.0326 |  | 2006 |
| 3935 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0317 |  | 2006 |
| 3935 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0312 |  | 2006 |
| 3944 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0634 |  | 2005 |
| 3944 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0662 |  | 2005 |
| 3944 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0658 |  | 2005 |
| 3954 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0539 |  | 2006 |
| 3954 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0485 |  | 2006 |
| 3954 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0768 |  | 2006 |
| 4041 | 6 | 1/1/2028 | 12/31/2028 | NOX | 0.0681 |  | 2013 |
| 4041 | 7 | 1/1/2028 | 12/31/2028 | NOX | 0.0603 |  | 2015 |
| 4041 | 8 | 1/1/2028 | 12/31/2028 | NOX | 0.0608 |  | 2015 |
| 4050 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0361 |  | 2014 |
| 4078 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.053 |  | 2014 |
| 4125 | 9 | 1/1/2028 | 12/31/2028 | NOX | 0.0368 |  | 2015 |
| 50776 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1051 |  | 2005 |
| 50776 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1056 |  | 2015 |
| 50974 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0573 |  | 2005 |
| 50974 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0793 |  | 2005 |
| 51 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1917 |  | 2014 |
| 52071 | 5A | 1/1/2028 | 12/31/2028 | NOX | 0.0618 |  | 2011 |
| 52071 | 5B | 1/1/2028 | 12/31/2028 | NOX | 0.0626 |  | 2011 |
| 54081 | BLR01A | 1/1/2028 | 12/31/2028 | NOX | 0.2608 |  | 2005 |
| 54081 | BLR01B | 1/1/2028 | 12/31/2028 | NOX | 0.26 |  | 2005 |
| 54081 | BLR02A | 1/1/2028 | 12/31/2028 | NOX | 0.2548 |  | 2005 |
| 54081 | BLR02B | 1/1/2028 | 12/31/2028 | NOX | 0.2547 |  | 2005 |
| 54081 | BLR03A | 1/1/2028 | 12/31/2028 | NOX | 0.2614 |  | 2005 |
| 54081 | BLR03B | 1/1/2028 | 12/31/2028 | NOX | 0.2616 |  | 2005 |
| 54081 | BLR04A | 1/1/2028 | 12/31/2028 | NOX | 0.2648 |  | 2005 |
| 54081 | BLR04B | 1/1/2028 | 12/31/2028 | NOX | 0.2647 |  | 2005 |
| 54304 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0879 |  | 2008 |
| 54755 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1316 |  | 2015 |
| 56 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.164 |  | 2011 |
| 56 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0585 |  | 2011 |
| 56068 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.049 |  | 2010 |
| 564 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1042 |  | 2015 |
| 56456 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0641 |  | 2012 |
| 56564 | SN-01 | 1/1/2028 | 12/31/2028 | NOX | 0.04 |  | 2014 |
| 56611 | S01 | 1/1/2028 | 12/31/2028 | NOX | 0.0397 |  | 2015 |
| 56671 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0648 |  | 2013 |
| 594 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0657 |  | 2012 |
| 60 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0619 |  | 2012 |
| 6002 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0656 |  | 2011 |
| 6002 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0538 |  | 2011 |
| 6002 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0634 |  | 2006 |
| 6002 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.063 |  | 2008 |
| 6004 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0394 |  | 2005 |
| 6004 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.039 |  | 2005 |
| 6016 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0736 |  | 2009 |
| 6018 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0518 |  | 2006 |
| 6019 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0562 |  | 2006 |
| 602 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0589 |  | 2007 |
| 602 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0733 |  | 2015 |
| 6031 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0885 |  | 2005 |
| 6041 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0829 |  | 2008 |
| 6041 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0729 |  | 2006 |
| 6041 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0577 |  | 2015 |
| 6041 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0604 |  | 2012 |
| 6052 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0475 |  | 2010 |
| 6052 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0507 |  | 2006 |
| 6065 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0613 |  | 2015 |
| 6068 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0988 |  | 2015 |
| 6068 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.1152 |  | 2015 |
| 6071 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0309 |  | 2005 |
| 6071 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0407 |  | 2015 |
| 6085 | 14 | 1/1/2028 | 12/31/2028 | NOX | 0.0979 |  | 2013 |
| 6094 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.082 |  | 2008 |
| 6094 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0801 |  | 2007 |
| 6094 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0744 |  | 2005 |
| 6096 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0582 |  | 2015 |
| 6113 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0343 |  | 2007 |
| 6113 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0672 |  | 2006 |
| 6113 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0659 |  | 2005 |
| 6113 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0632 |  | 2008 |
| 6113 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0597 |  | 2007 |
| 6137 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0756 |  | 2006 |
| 6137 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1009 |  | 2006 |
| 6147 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1187 |  | 2014 |
| 6147 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.1485 |  | 2014 |
| 6170 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0498 |  | 2007 |
| 6170 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0601 |  | 2007 |
| 6190 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.1358 |  | 2015 |
| 6190 | 1-Mar | 1/1/2028 | 12/31/2028 | NOX | 0.0289 |  | 2011 |
| 6190 | 2-Mar | 1/1/2028 | 12/31/2028 | NOX | 0.0419 |  | 2014 |
| 6195 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0829 |  | 2013 |
| 6195 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0596 |  | 2014 |
| 6213 | 1SG1 | 1/1/2028 | 12/31/2028 | NOX | 0.062 |  | 2014 |
| 6213 | 2SG1 | 1/1/2028 | 12/31/2028 | NOX | 0.0587 |  | 2015 |
| 6249 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0623 |  | 2005 |
| 6249 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0679 |  | 2005 |
| 6249 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0812 |  | 2015 |
| 6249 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0869 |  | 2012 |
| 6250 | 1A | 1/1/2028 | 12/31/2028 | NOX | 0.061 |  | 2007 |
| 6250 | 1B | 1/1/2028 | 12/31/2028 | NOX | 0.0614 |  | 2007 |
| 6257 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0613 |  | 2014 |
| 6257 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0606 |  | 2014 |
| 6257 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0593 |  | 2012 |
| 6257 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0627 |  | 2013 |
| 6264 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0387 |  | 2007 |
| 628 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0504 |  | 2014 |
| 628 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.0446 |  | 2010 |
| 641 | 5 | 1/1/2028 | 12/31/2028 | NOX | 0.1193 |  | 2015 |
| 641 | 7 | 1/1/2028 | 12/31/2028 | NOX | 0.0842 |  | 2008 |
| 645 | BB01 | 1/1/2028 | 12/31/2028 | NOX | 0.0823 |  | 2011 |
| 645 | BB02 | 1/1/2028 | 12/31/2028 | NOX | 0.0809 |  | 2010 |
| 645 | BB03 | 1/1/2028 | 12/31/2028 | NOX | 0.0908 |  | 2015 |
| 645 | BB04 | 1/1/2028 | 12/31/2028 | NOX | 0.0748 |  | 2010 |
| 663 | B2 | 1/1/2028 | 12/31/2028 | NOX | 0.0571 |  | 2012 |
| 667 | 1A | 1/1/2028 | 12/31/2028 | NOX | 0.0252 |  | 2013 |
| 667 | 2A | 1/1/2028 | 12/31/2028 | NOX | 0.042 |  | 2012 |
| 6705 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0948 |  | 2007 |
| 6768 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.1046 |  | 2013 |
| 6823 | W1 | 1/1/2028 | 12/31/2028 | NOX | 0.0477 |  | 2006 |
| 703 | 1BLR | 1/1/2028 | 12/31/2028 | NOX | 0.0547 |  | 2008 |
| 703 | 2BLR | 1/1/2028 | 12/31/2028 | NOX | 0.0543 |  | 2006 |
| 703 | 3BLR | 1/1/2028 | 12/31/2028 | NOX | 0.0553 |  | 2006 |
| 703 | 4BLR | 1/1/2028 | 12/31/2028 | NOX | 0.0525 |  | 2013 |
| 7030 | U1 | 1/1/2028 | 12/31/2028 | NOX | 0.097 |  | 2015 |
| 7030 | U2 | 1/1/2028 | 12/31/2028 | NOX | 0.0979 |  | 2015 |
| 708 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0553 |  | 2007 |
| 7097 | \*\*2 | 1/1/2028 | 12/31/2028 | NOX | 0.0392 |  | 2011 |
| 7210 | COP1 | 1/1/2028 | 12/31/2028 | NOX | 0.0799 |  | 2009 |
| 7213 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.2327 |  | 2005 |
| 7213 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.2428 |  | 2007 |
| 7343 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.1873 |  | 2015 |
| 8 | 10 | 1/1/2028 | 12/31/2028 | NOX | 0.068 |  | 2006 |
| 8042 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.028 |  | 2007 |
| 8042 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0382 |  | 2009 |
| 8102 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0686 |  | 2007 |
| 8102 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0553 |  | 2005 |
| 8226 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0901 |  | 2006 |
| 861 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0495 |  | 2011 |
| 861 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0524 |  | 2008 |
| 876 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0577 |  | 2013 |
| 876 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.06 |  | 2009 |
| 879 | 51 | 1/1/2028 | 12/31/2028 | NOX | 0.0985 |  | 2013 |
| 879 | 52 | 1/1/2028 | 12/31/2028 | NOX | 0.0987 |  | 2015 |
| 879 | 61 | 1/1/2028 | 12/31/2028 | NOX | 0.0973 |  | 2013 |
| 879 | 62 | 1/1/2028 | 12/31/2028 | NOX | 0.0885 |  | 2015 |
| 889 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.0509 |  | 2010 |
| 891 | 9 | 1/1/2028 | 12/31/2028 | NOX | 0.029 |  | 2008 |
| 963 | 31 | 1/1/2028 | 12/31/2028 | NOX | 0.0938 |  | 2007 |
| 963 | 32 | 1/1/2028 | 12/31/2028 | NOX | 0.0846 |  | 2008 |
| 963 | 33 | 1/1/2028 | 12/31/2028 | NOX | 0.0603 |  | 2014 |
| 976 | 123 | 1/1/2028 | 12/31/2028 | NOX | 0.0656 |  | 2006 |
| 976 | 4 | 1/1/2028 | 12/31/2028 | NOX | 0.0785 |  | 2015 |
| 983 | 1 | 1/1/2028 | 12/31/2028 | NOX | 0.0735 |  | 2005 |
| 983 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.075 |  | 2005 |
| 983 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0742 |  | 2005 |
| 994 | 2 | 1/1/2028 | 12/31/2028 | NOX | 0.051 |  | 2005 |
| 994 | 3 | 1/1/2028 | 12/31/2028 | NOX | 0.0466 |  | 2005 |
| 997 | 12 | 1/1/2028 | 12/31/2028 | NOX | 0.092 |  | 2005 |

# Appendix B

Table 4: Unit level results in total tons during non-ozone season from ERTAC v2.3, v2.6, and the best observed rate (BOR) runs

| RPO | St. | Facility Name | Orispl | Unit ID | v2.3 Base | v2.6 Base | v2.6 BOR | v2.6-v2.3 | BOR-v2.6 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MANE-VU | CT | Bridgeport Harbor Station | 568 | BHB3 | 191.82 | 64.02 | 64.02 | -127.8 | 0 |
| MANE-VU | CT | Bridgeport Harbor Station | 568 | G09001 | 255.33 |  |  | -255.33 | 0 |
| MANE-VU | DE | Indian River | 594 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | DE | Indian River | 594 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | DE | Indian River | 594 | 4 | 252.47 | 211.09 | 138.68 | -41.38 | -72.4 |
| MANE-VU | MA | Brayton Point | 1619 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MA | Brayton Point | 1619 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MA | Brayton Point | 1619 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MA | Brayton Point | 1619 | G25001 | 680.46 |  |  | -680.46 | 0 |
| MANE-VU | MA | Mount Tom | 1606 | 1 | 48.88 | 0.00 | 0.00 | -48.88 | 0 |
| MANE-VU | MA | Salem Harbor | 1626 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MA | Salem Harbor | 1626 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MA | Salem Harbor | 1626 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MA | Salem Harbor | 1626 | G25002 | 550.83 |  |  | -550.83 | 0 |
| MANE-VU | MD | AES Warrior Run | 10678 | 001 | 783.40 | 784.39 | 250.96 | 0.99 | -533.42 |
| MANE-VU | MD | Brandon Shores | 602 | 1 | 1,875.07 | 1,633.57 | 494.94 | -241.5 | -1138.62 |
| MANE-VU | MD | Brandon Shores | 602 | 2 | 2,018.61 | 1,707.75 | 592.42 | -310.87 | -1115.33 |
| MANE-VU | MD | C P Crane | 1552 | 1 | 566.75 | 468.36 | 290.11 | -98.39 | -178.26 |
| MANE-VU | MD | C P Crane | 1552 | 2 | 562.75 | 454.28 | 262.67 | -108.48 | -191.61 |
| MANE-VU | MD | Herbert A Wagner | 1554 | 2 | 540.51 | 454.70 | 255.66 | -85.81 | -199.05 |
| MANE-VU | MD | Herbert A Wagner | 1554 | 3 | 437.27 | 366.40 | 128.66 | -70.87 | -237.74 |
| MANE-VU | MD | Mirant Chalk Point | 1571 | 1 | 978.60 | 819.08 | 446.46 | -159.51 | -372.62 |
| MANE-VU | MD | Mirant Chalk Point | 1571 | 2 | 1,728.80 | 1,598.84 | 1,218.25 | -129.96 | -380.58 |
| MANE-VU | MD | Mirant Dickerson | 1572 | 1 | 275.60 | 232.61 | 179.44 | -42.99 | -53.17 |
| MANE-VU | MD | Mirant Dickerson | 1572 | 2 | 402.97 | 347.25 | 264.60 | -55.71 | -82.66 |
| MANE-VU | MD | Mirant Dickerson | 1572 | 3 | 343.85 | 296.97 | 224.59 | -46.88 | -72.39 |
| MANE-VU | MD | Mirant Morgantown | 1573 | 1 | 432.12 | 388.58 | 253.99 | -43.54 | -134.59 |
| MANE-VU | MD | Mirant Morgantown | 1573 | 2 | 361.06 | 342.88 | 307.10 | -18.19 | -35.78 |
| MANE-VU | MD | R. Paul Smith Power Station | 1570 | 11 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | MD | R. Paul Smith Power Station | 1570 | 9 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NH | Merrimack | 2364 | 1 | 366.58 | 291.78 | 166.18 | -74.8 | -125.6 |
| MANE-VU | NH | Merrimack | 2364 | 2 | 856.80 | 545.00 | 324.68 | -311.8 | -220.32 |
| MANE-VU | NH | Merrimack | 2364 | G33001 | 623.79 |  |  | -623.79 | 0 |
| MANE-VU | NH | Schiller | 2367 | 4 | 140.70 | 73.12 | 44.66 | -67.58 | -28.46 |
| MANE-VU | NH | Schiller | 2367 | 6 | 143.08 | 73.95 | 47.08 | -69.12 | -26.87 |
| MANE-VU | NJ | B L England | 2378 | 1 |  | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NJ | B L England | 2378 | 2 |  | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NJ | Carneys Point | 10566 | 1001 | 230.87 | 194.05 | 177.35 | -36.82 | -16.7 |
| MANE-VU | NJ | Carneys Point | 10566 | 1002 | 232.58 | 188.24 | 167.86 | -44.34 | -20.38 |
| MANE-VU | NJ | Deepwater | 2384 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NJ | Hudson Generating Station | 2403 | 2 | 335.67 | 130.25 | 107.82 | -205.42 | -22.43 |
| MANE-VU | NJ | Logan Generating Plant | 10043 | 1001 | 165.43 | 116.54 | 91.00 | -48.89 | -25.54 |
| MANE-VU | NJ | Mercer Generating Station | 2408 | 1 | 89.44 | 48.11 | 39.08 | -41.33 | -9.03 |
| MANE-VU | NJ | Mercer Generating Station | 2408 | 2 | 78.56 | 41.16 | 24.88 | -37.4 | -16.28 |
| MANE-VU | NY | AES Cayuga, LLC | 2535 | 1 | 0.00 | 85.76 | 85.76 | 85.76 | 0 |
| MANE-VU | NY | AES Cayuga, LLC | 2535 | 2 | 0.00 | 81.08 | 81.08 | 81.08 | 0 |
| MANE-VU | NY | AES Greenidge | 2527 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NY | AES Somerset (Kintigh ) | 6082 | 1 | 1,026.71 | 533.17 | 533.17 | -493.54 | 0 |
| MANE-VU | NY | AES Somerset (Kintigh ) | 6082 | G36002 | 1,512.46 |  |  | -1512.46 | 0 |
| MANE-VU | NY | AES Westover (Goudey) | 2526 | 13 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NY | Black River Generation, LLC | 10464 | E0001 |  | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NY | Black River Generation, LLC | 10464 | E0002 |  | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NY | Black River Generation, LLC | 10464 | E0003 |  | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NY | Dunkirk | 2554 | 1 | 56.29 | 29.65 | 29.65 | -26.65 | 0 |
| MANE-VU | NY | Dunkirk | 2554 | 2 | 85.81 | 37.83 | 37.83 | -47.97 | 0 |
| MANE-VU | NY | Dunkirk | 2554 | 3 | 203.76 | 107.83 | 107.83 | -95.93 | 0 |
| MANE-VU | NY | Dunkirk | 2554 | 4 | 175.17 | 82.39 | 82.39 | -92.78 | 0 |
| MANE-VU | NY | Dunkirk | 2554 | G36003 | 1,292.30 |  |  | -1292.3 | 0 |
| MANE-VU | NY | Dynegy Danskammer | 2480 | 3 | 106.46 |  |  | -106.46 | 0 |
| MANE-VU | NY | Dynegy Danskammer | 2480 | 4 | 187.60 |  |  | -187.6 | 0 |
| MANE-VU | NY | Huntley Power | 2549 | 67 | 206.64 | 92.49 | 92.49 | -114.15 | 0 |
| MANE-VU | NY | Huntley Power | 2549 | 68 | 205.52 | 88.10 | 88.10 | -117.42 | 0 |
| MANE-VU | NY | Niagara Generation, LLC | 50202 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | NY | S A Carlson | 2682 | 10 | 9.93 |  |  | -9.93 | 0 |
| MANE-VU | NY | S A Carlson | 2682 | 12 | 6.09 | 0.00 | 0.00 | -6.09 | 0 |
| MANE-VU | NY | S A Carlson | 2682 | 9 | 14.74 |  |  | -14.74 | 0 |
| MANE-VU | NY | Syracuse Energy Corporation | 50651 | BLR1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | AES Beaver Valley LLC | 10676 | 032 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | AES Beaver Valley LLC | 10676 | 033 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | AES Beaver Valley LLC | 10676 | 034 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | AES Beaver Valley LLC | 10676 | 035 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Armstrong Power Station | 3178 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Armstrong Power Station | 3178 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Bruce Mansfield | 6094 | 1 | 2,868.78 | 2,215.54 | 1,513.96 | -653.24 | -701.59 |
| MANE-VU | PA | Bruce Mansfield | 6094 | 2 | 1,972.34 | 1,984.86 | 1,458.82 | 12.52 | -526.05 |
| MANE-VU | PA | Bruce Mansfield | 6094 | 3 | 3,883.99 | 3,611.04 | 1,260.88 | -272.95 | -2350.16 |
| MANE-VU | PA | Brunner Island | 3140 | 1 | 2,367.30 | 496.73 | 496.73 | -1870.57 | 0 |
| MANE-VU | PA | Brunner Island | 3140 | 2 | 2,984.35 | 463.63 | 463.63 | -2520.72 | 0 |
| MANE-VU | PA | Brunner Island | 3140 | 3 | 5,851.85 | 1,018.50 | 1,018.50 | -4833.35 | 0 |
| MANE-VU | PA | Cambria Cogen | 10641 | 1 | 229.46 | 220.52 | 137.57 | -8.95 | -82.95 |
| MANE-VU | PA | Cambria Cogen | 10641 | 2 | 231.71 | 240.87 | 146.45 | 9.17 | -94.42 |
| MANE-VU | PA | Cheswick | 8226 | 1 | 1,891.04 | 1,783.68 | 590.25 | -107.36 | -1193.43 |
| MANE-VU | PA | Colver Power Project | 10143 | AAB01 | 415.38 | 435.98 | 435.98 | 20.59 | 0 |
| MANE-VU | PA | Conemaugh | 3118 | 1 | 2,880.89 | 1,488.43 | 1,488.43 | -1392.46 | 0 |
| MANE-VU | PA | Conemaugh | 3118 | 2 | 3,458.32 | 2,231.46 | 2,231.46 | -1226.85 | 0 |
| MANE-VU | PA | Cromby | 3159 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Ebensburg Power Company | 10603 | 031 | 190.25 | 196.44 | 196.44 | 6.18 | 0 |
| MANE-VU | PA | Eddystone Generating Station | 3161 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Eddystone Generating Station | 3161 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Elrama | 3098 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Elrama | 3098 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Elrama | 3098 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Elrama | 3098 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Gilberton Power Company | 10113 | 031 | 55.80 | 58.58 | 58.58 | 2.77 | 0 |
| MANE-VU | PA | Gilberton Power Company | 10113 | 032 | 56.33 | 58.18 | 58.18 | 1.85 | 0 |
| MANE-VU | PA | Hatfields Ferry Power Station | 3179 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Hatfields Ferry Power Station | 3179 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Hatfields Ferry Power Station | 3179 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Homer City | 3122 | 1 | 1,619.41 | 886.11 | 492.53 | -733.3 | -393.58 |
| MANE-VU | PA | Homer City | 3122 | 2 | 1,615.99 | 891.03 | 613.33 | -724.96 | -277.71 |
| MANE-VU | PA | Homer City | 3122 | 3 | 2,744.88 | 1,487.23 | 1,080.72 | -1257.65 | -406.51 |
| MANE-VU | PA | Keystone | 3136 | 1 | 2,753.58 | 1,842.58 | 661.79 | -911 | -1180.79 |
| MANE-VU | PA | Keystone | 3136 | 2 | 3,601.94 | 2,429.89 | 876.79 | -1172.05 | -1553.11 |
| MANE-VU | PA | Keystone | 3136 | G42001 | 922.83 |  |  | -922.83 | 0 |
| MANE-VU | PA | Mitchell Power Station | 3181 | 33 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Montour | 3149 | 1 | 2,210.20 | 1,157.82 | 560.58 | -1052.38 | -597.24 |
| MANE-VU | PA | Montour | 3149 | 2 | 2,656.82 | 1,664.18 | 801.58 | -992.64 | -862.6 |
| MANE-VU | PA | Mt. Carmel Cogeneration | 10343 | SG-101 | 216.75 | 233.07 | 233.07 | 16.33 | 0 |
| MANE-VU | PA | New Castle | 3138 | 3 | 131.26 | 40.37 | 40.37 | -90.9 | 0 |
| MANE-VU | PA | New Castle | 3138 | 4 | 207.88 | 64.01 | 64.01 | -143.87 | 0 |
| MANE-VU | PA | New Castle | 3138 | 5 | 205.67 | 47.02 | 47.02 | -158.66 | 0 |
| MANE-VU | PA | Northampton Generating Plant | 50888 | NGC01 | 262.11 | 267.14 | 267.14 | 5.03 | 0 |
| MANE-VU | PA | Northeastern Power Company | 50039 | 031 | 88.19 | 82.04 | 82.04 | -6.15 | 0 |
| MANE-VU | PA | Panther Creek Energy Facility | 50776 | 1 | 169.57 | 172.85 | 135.78 | 3.27 | -37.07 |
| MANE-VU | PA | Panther Creek Energy Facility | 50776 | 2 | 155.56 | 160.19 | 135.58 | 4.63 | -24.61 |
| MANE-VU | PA | Piney Creek Power Plant | 54144 | 031 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Portland | 3113 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Portland | 3113 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Scrubgrass Generating Plant | 50974 | 1 | 232.81 | 224.19 | 91.04 | -8.62 | -133.15 |
| MANE-VU | PA | Scrubgrass Generating Plant | 50974 | 2 | 246.63 | 244.69 | 125.52 | -1.94 | -119.17 |
| MANE-VU | PA | Seward | 3130 | 1 | 643.15 | 735.76 | 490.57 | 92.62 | -245.19 |
| MANE-VU | PA | Seward | 3130 | 2 | 570.78 | 549.88 | 368.32 | -20.9 | -181.56 |
| MANE-VU | PA | Shawville | 3131 | 1 | 0.00 | 97.86 | 97.86 | 97.86 | 0 |
| MANE-VU | PA | Shawville | 3131 | 2 | 0.00 | 104.96 | 104.96 | 104.96 | 0 |
| MANE-VU | PA | Shawville | 3131 | 3 | 0.00 | 174.37 | 174.37 | 174.37 | 0 |
| MANE-VU | PA | Shawville | 3131 | 4 | 0.00 | 189.64 | 189.64 | 189.64 | 0 |
| MANE-VU | PA | St. Nicholas Cogeneration Project | 54634 | 1 | 130.34 | 132.20 | 132.20 | 1.86 | 0 |
| MANE-VU | PA | Sunbury | 3152 | 1A | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Sunbury | 3152 | 1B | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Sunbury | 3152 | 2A | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Sunbury | 3152 | 2B | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Sunbury | 3152 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Sunbury | 3152 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Titus | 3115 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Titus | 3115 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Titus | 3115 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| MANE-VU | PA | Wheelabrator - Frackville | 50879 | GEN1 | 255.99 | 268.66 | 268.66 | 12.67 | 0 |
| MANE-VU | PA | WPS Westwood Generation, LLC | 50611 | 031 | 168.99 | 141.09 | 141.09 | -27.9 | 0 |
| LADCO | IL | Baldwin Energy Complex | 889 | 1 | 733.16 | 0.00 | 0.00 | -733.16 | 0 |
| LADCO | IL | Baldwin Energy Complex | 889 | 2 | 786.37 | 786.70 | 680.37 | 0.34 | -106.33 |
| LADCO | IL | Baldwin Energy Complex | 889 | 3 | 1,383.98 | 0.00 | 0.00 | -1383.98 | 0 |
| LADCO | IL | Coffeen | 861 | 01 | 336.32 | 344.49 | 324.15 | 8.17 | -20.33 |
| LADCO | IL | Coffeen | 861 | 02 | 476.27 | 483.82 | 481.39 | 7.56 | -2.44 |
| LADCO | IL | Crawford | 867 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Crawford | 867 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Dallman | 963 | 31 | 142.32 | 148.60 | 126.72 | 6.28 | -21.88 |
| LADCO | IL | Dallman | 963 | 32 | 105.68 | 111.05 | 85.41 | 5.38 | -25.64 |
| LADCO | IL | Dallman | 963 | 33 | 190.36 | 196.00 | 153.60 | 5.64 | -42.4 |
| LADCO | IL | Dallman | 963 | 4 | 143.82 | 149.85 | 149.85 | 6.03 | 0 |
| LADCO | IL | Duck Creek | 6016 | 1 | 646.11 | 673.96 | 504.16 | 27.86 | -169.8 |
| LADCO | IL | E D Edwards | 856 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | E D Edwards | 856 | 2 | 1,252.54 | 1,307.05 | 1,307.05 | 54.52 | 0 |
| LADCO | IL | E D Edwards | 856 | 3 | 368.98 | 385.93 | 385.93 | 16.96 | 0 |
| LADCO | IL | Fisk | 886 | 19 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Havana | 891 | 9 | 646.74 | 654.80 | 344.39 | 8.06 | -310.42 |
| LADCO | IL | Hennepin Power Station | 892 | 1 | 236.67 | 240.35 | 240.35 | 3.68 | 0 |
| LADCO | IL | Hennepin Power Station | 892 | 2 | 761.04 | 770.02 | 770.02 | 8.98 | 0 |
| LADCO | IL | Hutsonville | 863 | 05 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Hutsonville | 863 | 06 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Joppa Steam | 887 | 1 | 536.62 | 563.69 | 563.69 | 27.08 | 0 |
| LADCO | IL | Joppa Steam | 887 | 2 | 401.47 | 416.65 | 416.65 | 15.18 | 0 |
| LADCO | IL | Joppa Steam | 887 | 3 | 469.91 | 492.88 | 492.88 | 22.97 | 0 |
| LADCO | IL | Joppa Steam | 887 | 4 | 481.26 | 504.70 | 504.70 | 23.44 | 0 |
| LADCO | IL | Joppa Steam | 887 | 5 | 496.98 | 521.56 | 521.56 | 24.58 | 0 |
| LADCO | IL | Joppa Steam | 887 | 6 | 498.58 | 523.34 | 523.34 | 24.75 | 0 |
| LADCO | IL | Kincaid Station | 876 | 1 | 666.22 | 615.59 | 507.42 | -50.63 | -108.17 |
| LADCO | IL | Kincaid Station | 876 | 2 | 569.27 | 505.72 | 433.47 | -63.55 | -72.25 |
| LADCO | IL | Marion | 976 | 123 | 273.02 | 287.88 | 182.46 | 14.86 | -105.42 |
| LADCO | IL | Marion | 976 | 4 | 796.66 | 823.48 | 318.46 | 26.82 | -505.02 |
| LADCO | IL | Meredosia | 864 | 05 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Newton | 6017 | 1 | 1,141.90 | 1,199.55 | 1,199.55 | 57.65 | 0 |
| LADCO | IL | Newton | 6017 | 2 | 1,111.27 | 0.00 | 0.00 | -1111.27 | 0 |
| LADCO | IL | Powerton | 879 | 51 | 1,018.52 | 908.82 | 895.19 | -109.7 | -13.63 |
| LADCO | IL | Powerton | 879 | 52 | 1,000.34 | 885.13 | 873.63 | -115.21 | -11.51 |
| LADCO | IL | Powerton | 879 | 61 | 1,120.51 | 987.61 | 951.43 | -132.9 | -36.18 |
| LADCO | IL | Powerton | 879 | 62 | 1,132.10 | 1,040.14 | 911.41 | -91.96 | -128.73 |
| LADCO | IL | Prairie State Generating Company | 55856 | 01 | 755.24 | 928.00 | 928.00 | 172.77 | 0 |
| LADCO | IL | Prairie State Generating Company | 55856 | 02 | 651.78 | 698.62 | 698.62 | 46.84 | 0 |
| LADCO | IL | Vermilion Power Station | 897 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Vermilion Power Station | 897 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IL | Waukegan | 883 | 7 | 586.91 | 545.11 | 545.11 | -41.8 | 0 |
| LADCO | IL | Waukegan | 883 | 8 | 1,009.30 | 875.74 | 875.74 | -133.55 | 0 |
| LADCO | IL | Will County | 884 | 4 | 540.35 | 501.70 | 501.70 | -38.65 | 0 |
| LADCO | IL | Wood River Power Station | 898 | 4 | 277.27 | 0.00 | 0.00 | -277.27 | 0 |
| LADCO | IL | Wood River Power Station | 898 | 5 | 1,208.76 | 0.00 | 0.00 | -1208.76 | 0 |
| LADCO | IN | A B Brown Generating Station | 6137 | 1 | 466.02 | 428.05 | 226.34 | -37.97 | -201.7 |
| LADCO | IN | A B Brown Generating Station | 6137 | 2 | 674.47 | 617.22 | 449.37 | -57.25 | -167.85 |
| LADCO | IN | Alcoa Allowance Management Inc | 6705 | 4 | 1,144.40 | 1,042.32 | 708.51 | -102.07 | -333.81 |
| LADCO | IN | Bailly Generating Station | 995 | 7 | 504.78 | 0.00 | 0.00 | -504.78 | 0 |
| LADCO | IN | Bailly Generating Station | 995 | 8 | 868.42 | 0.00 | 0.00 | -868.42 | 0 |
| LADCO | IN | Cayuga | 1001 | 1 | 401.68 | 1,981.33 | 1,981.33 | 1579.65 | 0 |
| LADCO | IN | Cayuga | 1001 | 2 | 465.72 | 2,390.54 | 2,390.54 | 1924.82 | 0 |
| LADCO | IN | Clifty Creek | 983 | 1 | 457.12 | 455.79 | 335.01 | -1.33 | -120.79 |
| LADCO | IN | Clifty Creek | 983 | 2 | 459.49 | 446.77 | 335.08 | -12.71 | -111.69 |
| LADCO | IN | Clifty Creek | 983 | 3 | 462.98 | 439.93 | 326.43 | -23.05 | -113.5 |
| LADCO | IN | Clifty Creek | 983 | 4 | 492.03 | 450.34 | 450.34 | -41.69 | 0 |
| LADCO | IN | Clifty Creek | 983 | 5 | 328.69 | 296.60 | 296.60 | -32.09 | 0 |
| LADCO | IN | Clifty Creek | 983 | 6 | 1,785.65 | 1,530.41 | 1,530.41 | -255.23 | 0 |
| LADCO | IN | Edwardsport | 1004 | 7-1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Edwardsport | 1004 | 7-2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Edwardsport | 1004 | 8-1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Edwardsport | 1004 | CTG1 | 553.47 | 556.42 | 253.14 | 2.94 | -303.28 |
| LADCO | IN | Edwardsport | 1004 | CTG2 | 561.92 | 540.95 | 289.99 | -20.97 | -250.96 |
| LADCO | IN | F B Culley Generating Station | 1012 | 2 | 62.19 | 57.30 | 47.30 | -4.9 | -9.99 |
| LADCO | IN | F B Culley Generating Station | 1012 | 3 | 531.84 | 491.92 | 475.43 | -39.92 | -16.49 |
| LADCO | IN | Frank E Ratts | 1043 | 1SG1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Frank E Ratts | 1043 | 2SG1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Gibson | 6113 | 1 | 1,300.80 | 1,364.43 | 334.28 | 63.62 | -1030.14 |
| LADCO | IN | Gibson | 6113 | 2 | 1,253.49 | 1,106.13 | 571.78 | -147.36 | -534.35 |
| LADCO | IN | Gibson | 6113 | 3 | 1,516.78 | 967.39 | 531.26 | -549.39 | -436.13 |
| LADCO | IN | Gibson | 6113 | 4 | 1,678.18 | 1,734.94 | 843.45 | 56.76 | -891.49 |
| LADCO | IN | Gibson | 6113 | 5 | 1,432.81 | 3,296.54 | 615.01 | 1863.73 | -2681.53 |
| LADCO | IN | IPL Eagle Valley Generating Station | 991 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | IPL Eagle Valley Generating Station | 991 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | IPL Eagle Valley Generating Station | 991 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | IPL Eagle Valley Generating Station | 991 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Merom | 6213 | 1SG1 | 1,200.08 | 1,092.10 | 745.00 | -107.98 | -347.1 |
| LADCO | IN | Merom | 6213 | 2SG1 | 1,296.80 | 1,173.86 | 720.80 | -122.94 | -453.06 |
| LADCO | IN | Michigan City Generating Station | 997 | 12 | 1,087.84 | 958.83 | 882.12 | -129.01 | -76.71 |
| LADCO | IN | New Energy Corp | 880087 | U-4000 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Petersburg | 994 | 1 | 1,103.46 | 990.11 | 990.11 | -113.35 | 0 |
| LADCO | IN | Petersburg | 994 | 2 | 1,482.04 | 1,335.20 | 480.58 | -146.84 | -854.62 |
| LADCO | IN | Petersburg | 994 | 3 | 1,851.90 | 1,620.75 | 526.86 | -231.15 | -1093.89 |
| LADCO | IN | Petersburg | 994 | 4 | 2,594.61 | 2,170.15 | 2,170.15 | -424.46 | 0 |
| LADCO | IN | R Gallagher | 1008 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | R Gallagher | 1008 | 2 | 199.86 | 0.00 | 0.00 | -199.86 | 0 |
| LADCO | IN | R Gallagher | 1008 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | R Gallagher | 1008 | 4 | 133.48 | 0.00 | 0.00 | -133.48 | 0 |
| LADCO | IN | R M Schahfer Generating Station | 6085 | 14 | 735.16 | 616.75 | 511.82 | -118.4 | -104.93 |
| LADCO | IN | R M Schahfer Generating Station | 6085 | 15 | 1,431.63 | 1,331.71 | 1,331.71 | -99.92 | 0 |
| LADCO | IN | R M Schahfer Generating Station | 6085 | 17 | 1,134.94 | 1,021.73 | 1,021.73 | -113.21 | 0 |
| LADCO | IN | R M Schahfer Generating Station | 6085 | 18 | 1,177.05 | 1,053.18 | 1,053.18 | -123.87 | 0 |
| LADCO | IN | Rockport | 6166 | MB1 | 2,673.85 | 2,573.28 | 2,573.28 | -100.57 | 0 |
| LADCO | IN | Rockport | 6166 | MB2 | 3,600.50 | 3,576.88 | 3,576.88 | -23.61 | 0 |
| LADCO | IN | State Line Generating Station (IN) | 981 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | State Line Generating Station (IN) | 981 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Tanners Creek | 988 | U1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Tanners Creek | 988 | U2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Tanners Creek | 988 | U3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Tanners Creek | 988 | U4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Wabash River | 1010 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Wabash River | 1010 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Wabash River | 1010 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Wabash River | 1010 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Wabash River | 1010 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | IN | Whitewater Valley | 1040 | 1 | 85.62 | 79.67 | 79.67 | -5.95 | 0 |
| LADCO | IN | Whitewater Valley | 1040 | 2 | 170.26 | 158.53 | 158.53 | -11.73 | 0 |
| LADCO | MI | B C Cobb | 1695 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | B C Cobb | 1695 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Belle River | 6034 | 1 | 1,403.38 | 1,754.50 | 1,754.50 | 351.12 | 0 |
| LADCO | MI | Belle River | 6034 | 2 | 2,797.11 | 3,481.06 | 3,481.06 | 683.95 | 0 |
| LADCO | MI | Cadillac Renewable Energy | 54415 | EUBLR | 64.53 | 134.04 | 134.04 | 69.51 | 0 |
| LADCO | MI | Dan E Karn | 1702 | 1 | 353.84 | 310.97 | 189.69 | -42.87 | -121.28 |
| LADCO | MI | Dan E Karn | 1702 | 2 | 266.33 | 318.53 | 176.38 | 52.2 | -142.14 |
| LADCO | MI | Eckert Station | 1831 | 1 | 95.10 | 0.00 | 0.00 | -95.1 | 0 |
| LADCO | MI | Eckert Station | 1831 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Eckert Station | 1831 | 3 | 55.32 | 0.00 | 0.00 | -55.32 | 0 |
| LADCO | MI | Eckert Station | 1831 | 4 | 267.21 | 0.00 | 0.00 | -267.21 | 0 |
| LADCO | MI | Eckert Station | 1831 | 5 | 150.59 | 0.00 | 0.00 | -150.59 | 0 |
| LADCO | MI | Eckert Station | 1831 | 6 | 224.67 | 0.00 | 0.00 | -224.67 | 0 |
| LADCO | MI | Endicott Generating | 4259 | 1 | 268.58 | 0.00 | 0.00 | -268.58 | 0 |
| LADCO | MI | Erickson | 1832 | 1 | 583.07 | 716.57 | 716.57 | 133.51 | 0 |
| LADCO | MI | Genesee Power Station | 54751 | 01 | 40.30 | 74.77 | 74.77 | 34.47 | 0 |
| LADCO | MI | Grayling Generating Station | 10822 | 1 |  | 127.96 | 127.96 | 127.96 | 0 |
| LADCO | MI | Harbor Beach | 1731 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | J B Sims | 1825 | 3 | 183.80 | 228.66 | 228.66 | 44.86 | 0 |
| LADCO | MI | J C Weadock | 1720 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | J C Weadock | 1720 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | J H Campbell | 1710 | 1 | 473.13 | 623.45 | 623.45 | 150.32 | 0 |
| LADCO | MI | J H Campbell | 1710 | 2 | 262.26 | 319.84 | 146.33 | 57.59 | -173.51 |
| LADCO | MI | J H Campbell | 1710 | 3 | 1,560.60 | 1,447.94 | 749.31 | -112.66 | -698.63 |
| LADCO | MI | J R Whiting | 1723 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | J R Whiting | 1723 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | J R Whiting | 1723 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | James De Young | 1830 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Monroe | 1733 | 1 | 3,341.41 | 1,158.27 | 550.18 | -2183.14 | -608.09 |
| LADCO | MI | Monroe | 1733 | 2 | 824.04 | 1,025.20 | 1,025.20 | 201.16 | 0 |
| LADCO | MI | Monroe | 1733 | 3 | 478.15 | 596.44 | 486.72 | 118.29 | -109.72 |
| LADCO | MI | Monroe | 1733 | 4 | 930.09 | 1,163.38 | 545.12 | 233.29 | -618.26 |
| LADCO | MI | Presque Isle | 1769 | 5 | 276.03 | 0.00 | 0.00 | -276.03 | 0 |
| LADCO | MI | Presque Isle | 1769 | 6 | 356.29 | 0.00 | 0.00 | -356.29 | 0 |
| LADCO | MI | Presque Isle | 1769 | 7 | 578.10 | 0.00 | 0.00 | -578.1 | 0 |
| LADCO | MI | Presque Isle | 1769 | 8 | 481.34 | 0.00 | 0.00 | -481.34 | 0 |
| LADCO | MI | Presque Isle | 1769 | 9 | 579.30 | 0.00 | 0.00 | -579.3 | 0 |
| LADCO | MI | River Rouge | 1740 | 2 | 630.00 | 0.00 | 0.00 | -630 | 0 |
| LADCO | MI | River Rouge | 1740 | 3 | 651.84 | 0.00 | 0.00 | -651.84 | 0 |
| LADCO | MI | Shiras | 1843 | 3 | 128.66 | 169.48 | 169.48 | 40.82 | 0 |
| LADCO | MI | St. Clair | 1743 | 1 | 437.46 | 0.00 | 0.00 | -437.46 | 0 |
| LADCO | MI | St. Clair | 1743 | 2 | 674.85 | 0.00 | 0.00 | -674.85 | 0 |
| LADCO | MI | St. Clair | 1743 | 3 | 716.17 | 0.00 | 0.00 | -716.17 | 0 |
| LADCO | MI | St. Clair | 1743 | 4 | 603.35 | 0.00 | 0.00 | -603.35 | 0 |
| LADCO | MI | St. Clair | 1743 | 6 | 646.42 | 0.00 | 0.00 | -646.42 | 0 |
| LADCO | MI | St. Clair | 1743 | 7 | 749.66 | 0.00 | 0.00 | -749.66 | 0 |
| LADCO | MI | TES Filer City Station | 50835 | 1 | 269.19 | 349.32 | 349.32 | 80.13 | 0 |
| LADCO | MI | TES Filer City Station | 50835 | 2 | 264.62 | 341.14 | 341.14 | 76.52 | 0 |
| LADCO | MI | Trenton Channel | 1745 | 16 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Trenton Channel | 1745 | 17 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Trenton Channel | 1745 | 18 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Trenton Channel | 1745 | 19 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MI | Trenton Channel | 1745 | 9A | 1,157.63 | 0.00 | 0.00 | -1157.63 | 0 |
| LADCO | MI | Wyandotte | 1866 | 7 | 70.96 | 88.01 | 88.01 | 17.05 | 0 |
| LADCO | MI | Wyandotte | 1866 | 8 | 97.07 | 120.76 | 120.76 | 23.69 | 0 |
| LADCO | MN | Allen S King | 1915 | 1 | 886.97 | 835.71 | 835.71 | -51.26 | 0 |
| LADCO | MN | Black Dog | 1904 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MN | Black Dog | 1904 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MN | Boswell Energy Center | 1893 | 1 | 359.50 | 343.05 | 266.18 | -16.46 | -76.87 |
| LADCO | MN | Boswell Energy Center | 1893 | 2 | 404.05 | 380.81 | 292.22 | -23.24 | -88.59 |
| LADCO | MN | Boswell Energy Center | 1893 | 3 | 475.15 | 453.92 | 428.11 | -21.23 | -25.82 |
| LADCO | MN | Boswell Energy Center | 1893 | 4 | 1,992.56 | 1,940.93 | 1,464.21 | -51.63 | -476.72 |
| LADCO | MN | Hoot Lake | 1943 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MN | Hoot Lake | 1943 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MN | Northeast Station | 1961 | NEPP | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MN | Sherburne County | 6090 | 1 | 2,486.82 | 2,278.17 | 2,278.17 | -208.65 | 0 |
| LADCO | MN | Sherburne County | 6090 | 2 | 2,378.65 | 2,189.06 | 2,189.06 | -189.59 | 0 |
| LADCO | MN | Sherburne County | 6090 | 3 | 1,660.23 | 1,524.25 | 1,524.25 | -135.98 | 0 |
| LADCO | MN | Silver Lake | 2008 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | MN | Taconite Harbor Energy Center | 10075 | 1 | 239.22 | 223.21 | 193.50 | -16.01 | -29.71 |
| LADCO | MN | Taconite Harbor Energy Center | 10075 | 2 | 189.14 | 176.61 | 150.87 | -12.53 | -25.74 |
| LADCO | MN | Taconite Harbor Energy Center | 10075 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Ashtabula | 2835 | 7 | 757.86 | 0.00 | 0.00 | -757.86 | 0 |
| LADCO | OH | Avon Lake Power Plant | 2836 | 10 | 6.64 | 6.01 | 6.01 | -0.63 | 0 |
| LADCO | OH | Avon Lake Power Plant | 2836 | 12 | 2,750.14 | 2,585.61 | 1,789.32 | -164.53 | -796.29 |
| LADCO | OH | Bay Shore | 2878 | 1 | 568.21 | 569.87 | 569.87 | 1.66 | 0 |
| LADCO | OH | Bay Shore | 2878 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Bay Shore | 2878 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Bay Shore | 2878 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Cardinal | 2828 | 1 | 365.75 | 361.50 | 248.97 | -4.26 | -112.53 |
| LADCO | OH | Cardinal | 2828 | 2 | 104.96 | 99.62 | 65.89 | -5.34 | -33.73 |
| LADCO | OH | Cardinal | 2828 | 3 | 602.92 | 512.59 | 179.60 | -90.34 | -332.99 |
| LADCO | OH | Conesville | 2840 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Conesville | 2840 | 4 | 684.49 | 648.42 | 480.92 | -36.07 | -167.5 |
| LADCO | OH | Conesville | 2840 | 5 | 2,069.72 | 1,906.61 | 1,906.61 | -163.1 | 0 |
| LADCO | OH | Conesville | 2840 | 6 | 2,921.05 | 2,519.01 | 2,519.01 | -402.04 | 0 |
| LADCO | OH | Eastlake | 2837 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Eastlake | 2837 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Eastlake | 2837 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Eastlake | 2837 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Eastlake | 2837 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Gen J M Gavin | 8102 | 1 | 2,489.38 | 2,198.76 | 1,986.77 | -290.62 | -212 |
| LADCO | OH | Gen J M Gavin | 8102 | 2 | 2,595.20 | 2,433.49 | 1,800.34 | -161.7 | -633.15 |
| LADCO | OH | Hamilton Municipal Power Plant | 2917 | 9 | 3.91 | 3.62 | 3.62 | -0.29 | 0 |
| LADCO | OH | J M Stuart | 2850 | 1 | 1,319.25 | 1,257.84 | 1,243.52 | -61.42 | -14.32 |
| LADCO | OH | J M Stuart | 2850 | 2 | 1,156.61 | 1,067.38 | 1,067.38 | -89.23 | 0 |
| LADCO | OH | J M Stuart | 2850 | 3 | 1,495.57 | 1,453.48 | 1,246.48 | -42.09 | -207 |
| LADCO | OH | J M Stuart | 2850 | 4 | 1,573.66 | 1,304.76 | 1,091.41 | -268.9 | -213.35 |
| LADCO | OH | Killen Station | 6031 | 2 | 2,761.67 | 2,511.35 | 1,063.75 | -250.32 | -1447.6 |
| LADCO | OH | Kyger Creek | 2876 | 1 | 831.81 | 817.06 | 375.56 | -14.74 | -441.5 |
| LADCO | OH | Kyger Creek | 2876 | 2 | 818.99 | 803.45 | 374.41 | -15.54 | -429.04 |
| LADCO | OH | Kyger Creek | 2876 | 3 | 2,764.74 | 2,530.75 | 387.39 | -233.99 | -2143.36 |
| LADCO | OH | Kyger Creek | 2876 | 4 | 687.66 | 538.28 | 248.11 | -149.37 | -290.17 |
| LADCO | OH | Kyger Creek | 2876 | 5 | 3,000.02 | 2,747.08 | 387.66 | -252.94 | -2359.42 |
| LADCO | OH | Lake Shore | 2838 | 18 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Miami Fort Generating Station | 2832 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Miami Fort Generating Station | 2832 | 7 | 2,058.30 | 1,847.47 | 609.81 | -210.83 | -1237.65 |
| LADCO | OH | Miami Fort Generating Station | 2832 | 8 | 1,582.85 | 1,312.47 | 520.22 | -270.38 | -792.25 |
| LADCO | OH | Muskingum River | 2872 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Muskingum River | 2872 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Muskingum River | 2872 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Muskingum River | 2872 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Muskingum River | 2872 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Niles | 2861 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Niles | 2861 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | O H Hutchings | 2848 | H-1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | O H Hutchings | 2848 | H-2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | O H Hutchings | 2848 | H-3 | 1.95 | 0.00 | 0.00 | -1.95 | 0 |
| LADCO | OH | O H Hutchings | 2848 | H-4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | O H Hutchings | 2848 | H-5 | 34.91 | 0.00 | 0.00 | -34.91 | 0 |
| LADCO | OH | O H Hutchings | 2848 | H-6 | 14.33 | 0.00 | 0.00 | -14.33 | 0 |
| LADCO | OH | Picway | 2843 | 9 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | W H Sammis | 2866 | 1 | 606.72 | 0.00 | 0.00 | -606.72 | 0 |
| LADCO | OH | W H Sammis | 2866 | 2 | 531.56 | 0.00 | 0.00 | -531.56 | 0 |
| LADCO | OH | W H Sammis | 2866 | 3 | 640.96 | 0.00 | 0.00 | -640.96 | 0 |
| LADCO | OH | W H Sammis | 2866 | 4 | 822.24 | 0.00 | 0.00 | -822.24 | 0 |
| LADCO | OH | W H Sammis | 2866 | 5 | 519.61 | 488.55 | 355.18 | -31.06 | -133.37 |
| LADCO | OH | W H Sammis | 2866 | 6 | 414.51 | 400.81 | 400.81 | -13.69 | 0 |
| LADCO | OH | W H Sammis | 2866 | 7 | 1,505.76 | 1,367.73 | 1,299.56 | -138.03 | -68.16 |
| LADCO | OH | W H Zimmer Generating Station | 6019 | 1 | 5,866.68 | 5,326.49 | 1,041.88 | -540.19 | -4284.61 |
| LADCO | OH | Walter C Beckjord Generating Station | 2830 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Walter C Beckjord Generating Station | 2830 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Walter C Beckjord Generating Station | 2830 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Walter C Beckjord Generating Station | 2830 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Walter C Beckjord Generating Station | 2830 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | OH | Walter C Beckjord Generating Station | 2830 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Alma | 4140 | B4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Alma | 4140 | B5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Bay Front | 3982 | 1 | 70.02 | 65.49 | 65.49 | -4.53 | 0 |
| LADCO | WI | Bay Front | 3982 | 2 | 72.62 | 67.91 | 67.91 | -4.71 | 0 |
| LADCO | WI | Blount Street | 3992 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Columbia | 8023 | 1 | 537.98 | 1,241.74 | 1,241.74 | 703.76 | 0 |
| LADCO | WI | Columbia | 8023 | 2 | 651.44 | 735.85 | 735.85 | 84.41 | 0 |
| LADCO | WI | Edgewater (4050) | 4050 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Edgewater (4050) | 4050 | 5 | 392.85 | 371.90 | 268.51 | -20.95 | -103.39 |
| LADCO | WI | Elm Road Generating Station | 56068 | 1 | 216.29 | 280.88 | 254.81 | 64.59 | -26.07 |
| LADCO | WI | Elm Road Generating Station | 56068 | 2 | 341.93 | 436.79 | 436.79 | 94.86 | 0 |
| LADCO | WI | Genoa | 4143 | 1 | 337.62 | 349.66 | 349.66 | 12.04 | 0 |
| LADCO | WI | J P Madgett | 4271 | B1 | 515.50 | 463.04 | 463.04 | -52.46 | 0 |
| LADCO | WI | Manitowoc | 4125 | 8 | 11.71 | 15.06 | 15.06 | 3.35 | 0 |
| LADCO | WI | Manitowoc | 4125 | 9 | 70.34 | 91.40 | 26.58 | 21.06 | -64.81 |
| LADCO | WI | Nelson Dewey | 4054 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Nelson Dewey | 4054 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Pleasant Prairie | 6170 | 1 | 729.86 | 938.57 | 712.52 | 208.72 | -226.06 |
| LADCO | WI | Pleasant Prairie | 6170 | 2 | 443.28 | 575.33 | 521.24 | 132.05 | -54.09 |
| LADCO | WI | Pulliam | 4072 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Pulliam | 4072 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Pulliam | 4072 | 7 | 134.10 | 177.79 | 177.79 | 43.68 | 0 |
| LADCO | WI | Pulliam | 4072 | 8 | 344.44 | 455.52 | 455.52 | 111.08 | 0 |
| LADCO | WI | South Oak Creek | 4041 | 5 | 191.79 | 245.82 | 245.82 | 54.03 | 0 |
| LADCO | WI | South Oak Creek | 4041 | 6 | 175.37 | 227.80 | 221.62 | 52.43 | -6.18 |
| LADCO | WI | South Oak Creek | 4041 | 7 | 268.53 | 314.94 | 306.30 | 46.41 | -8.64 |
| LADCO | WI | South Oak Creek | 4041 | 8 | 299.97 | 351.17 | 344.37 | 51.2 | -6.8 |
| LADCO | WI | Weston | 4078 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| LADCO | WI | Weston | 4078 | 2 | 0.00 |  |  | 0 | 0 |
| LADCO | WI | Weston | 4078 | 3 | 452.89 | 588.87 | 588.87 | 135.98 | 0 |
| LADCO | WI | Weston | 4078 | 4 | 425.32 | 561.11 | 547.40 | 135.79 | -13.7 |
| SESARM | AL | Barry | 3 | 3 |  | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Barry | 3 | 4 | 647.00 | 512.46 | 360.76 | -134.54 | -151.71 |
| SESARM | AL | Barry | 3 | 5 | 462.26 | 365.12 | 266.82 | -97.14 | -98.3 |
| SESARM | AL | Charles R Lowman | 56 | 1 | 311.64 | 250.51 | 250.51 | -61.12 | 0 |
| SESARM | AL | Charles R Lowman | 56 | 2 | 1,854.45 | 1,463.25 | 696.17 | -391.19 | -767.08 |
| SESARM | AL | Charles R Lowman | 56 | 3 | 401.69 | 323.29 | 251.17 | -78.4 | -72.12 |
| SESARM | AL | Colbert | 47 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Colbert | 47 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Colbert | 47 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Colbert | 47 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Colbert | 47 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | E C Gaston | 26 | 5 | 2,066.34 | 1,604.78 | 927.73 | -461.56 | -677.05 |
| SESARM | AL | Gorgas | 8 | 10 | 2,255.12 | 1,768.99 | 498.20 | -486.13 | -1270.79 |
| SESARM | AL | Gorgas | 8 | 6 | 270.56 | 0.00 | 0.00 | -270.56 | 0 |
| SESARM | AL | Gorgas | 8 | 7 | 356.36 | 0.00 | 0.00 | -356.36 | 0 |
| SESARM | AL | Gorgas | 8 | 8 | 458.15 | 356.87 | 356.87 | -101.28 | 0 |
| SESARM | AL | Gorgas | 8 | 9 | 616.53 | 484.85 | 484.85 | -131.68 | 0 |
| SESARM | AL | Greene County | 10 | 1 | 1,814.11 |  |  | -1814.11 | 0 |
| SESARM | AL | Greene County | 10 | 2 | 888.23 |  |  | -888.23 | 0 |
| SESARM | AL | James H Miller Jr | 6002 | 1 | 1,950.30 | 1,514.93 | 994.69 | -435.37 | -520.24 |
| SESARM | AL | James H Miller Jr | 6002 | 2 | 2,821.75 | 2,209.13 | 797.80 | -612.62 | -1411.33 |
| SESARM | AL | James H Miller Jr | 6002 | 3 | 3,003.08 | 2,346.58 | 970.73 | -656.5 | -1375.85 |
| SESARM | AL | James H Miller Jr | 6002 | 4 | 1,631.72 | 1,282.85 | 1,031.69 | -348.87 | -251.17 |
| SESARM | AL | James H Miller Jr | 6002 | G01001 | 603.26 |  |  | -603.26 | 0 |
| SESARM | AL | Widows Creek | 50 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Widows Creek | 50 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Widows Creek | 50 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Widows Creek | 50 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Widows Creek | 50 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Widows Creek | 50 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | AL | Widows Creek | 50 | 7 | 625.05 | 0.00 | 0.00 | -625.05 | 0 |
| SESARM | AL | Widows Creek | 50 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | FL | Big Bend | 645 | BB01 | 638.51 | 658.49 | 634.44 | 19.97 | -24.05 |
| SESARM | FL | Big Bend | 645 | BB02 | 285.36 | 294.33 | 273.65 | 8.98 | -20.68 |
| SESARM | FL | Big Bend | 645 | BB03 | 643.94 | 664.67 | 627.76 | 20.73 | -36.91 |
| SESARM | FL | Big Bend | 645 | BB04 | 649.99 | 669.38 | 652.67 | 19.39 | -16.71 |
| SESARM | FL | C D McIntosh Jr Power Plant | 676 | 3 | 519.42 | 537.84 | 537.84 | 18.42 | 0 |
| SESARM | FL | Cedar Bay Generating Co. | 10672 | CBA | 249.95 | 0.00 | 0.00 | -249.95 | 0 |
| SESARM | FL | Cedar Bay Generating Co. | 10672 | CBB | 245.89 | 0.00 | 0.00 | -245.89 | 0 |
| SESARM | FL | Cedar Bay Generating Co. | 10672 | CBC | 243.19 | 0.00 | 0.00 | -243.19 | 0 |
| SESARM | FL | Central Power & Lime | 10333 | 1 | 0.00 |  |  | 0 | 0 |
| SESARM | FL | Crist Electric Generating Plant | 641 | 4 | 42.98 | 33.52 | 33.52 | -9.46 | 0 |
| SESARM | FL | Crist Electric Generating Plant | 641 | 5 | 310.17 | 246.12 | 135.60 | -64.05 | -110.52 |
| SESARM | FL | Crist Electric Generating Plant | 641 | 6 | 110.48 | 180.30 | 180.30 | 69.82 | 0 |
| SESARM | FL | Crist Electric Generating Plant | 641 | 7 | 1,535.81 | 1,162.80 | 651.15 | -373.01 | -511.65 |
| SESARM | FL | Crystal River | 628 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | FL | Crystal River | 628 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | FL | Crystal River | 628 | 4 | 469.28 | 483.54 | 460.45 | 14.26 | -23.09 |
| SESARM | FL | Crystal River | 628 | 5 | 596.08 | 612.21 | 593.59 | 16.13 | -18.62 |
| SESARM | FL | Curtis H. Stanton Energy Center | 564 | 1 | 1,374.19 | 1,418.02 | 1,418.02 | 43.83 | 0 |
| SESARM | FL | Curtis H. Stanton Energy Center | 564 | 2 | 998.75 | 1,028.55 | 697.95 | 29.8 | -330.59 |
| SESARM | FL | Deerhaven | 663 | B2 | 145.30 | 149.55 | 139.13 | 4.25 | -10.42 |
| SESARM | FL | Indiantown Cogeneration Facility | 50976 | 01 | 472.92 | 486.72 | 486.72 | 13.81 | 0 |
| SESARM | FL | Lansing Smith Generating Plant | 643 | 1 | 583.09 | 0.00 | 0.00 | -583.09 | 0 |
| SESARM | FL | Lansing Smith Generating Plant | 643 | 2 | 644.73 | 0.00 | 0.00 | -644.73 | 0 |
| SESARM | FL | Northside | 667 | 1A | 106.35 | 110.07 | 57.40 | 3.72 | -52.68 |
| SESARM | FL | Northside | 667 | 2A | 172.84 | 177.93 | 135.63 | 5.08 | -42.29 |
| SESARM | FL | Polk | 7242 | \*\*1 |  | 183.15 | 183.15 | 183.15 | 0 |
| SESARM | FL | Scholz Electric Generating Plant | 642 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | FL | Scholz Electric Generating Plant | 642 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | FL | Seminole (136) | 136 | 1 | 536.22 | 553.49 | 429.70 | 17.27 | -123.79 |
| SESARM | FL | Seminole (136) | 136 | 2 | 536.21 | 552.17 | 428.29 | 15.96 | -123.88 |
| SESARM | FL | St. Johns River Power | 207 | 1 | 1,667.14 | 1,720.55 | 1,041.80 | 53.41 | -678.75 |
| SESARM | FL | St. Johns River Power | 207 | 2 | 1,477.86 | 1,520.27 | 1,209.33 | 42.42 | -310.94 |
| SESARM | GA | Bowen | 703 | 1BLR | 2,531.48 | 1,990.02 | 618.49 | -541.46 | -1371.53 |
| SESARM | GA | Bowen | 703 | 2BLR | 1,603.59 | 1,275.94 | 380.68 | -327.65 | -895.26 |
| SESARM | GA | Bowen | 703 | 3BLR | 1,112.25 | 898.38 | 552.01 | -213.87 | -346.38 |
| SESARM | GA | Bowen | 703 | 4BLR | 1,515.07 | 1,218.05 | 524.16 | -297.01 | -693.89 |
| SESARM | GA | Bowen | 703 | G13002 | 283.46 |  |  | -283.46 | 0 |
| SESARM | GA | Hammond | 708 | 1 | 167.15 | 133.00 | 133.00 | -34.16 | 0 |
| SESARM | GA | Hammond | 708 | 2 | 260.48 | 205.78 | 205.78 | -54.7 | 0 |
| SESARM | GA | Hammond | 708 | 3 | 170.29 | 134.03 | 134.03 | -36.26 | 0 |
| SESARM | GA | Hammond | 708 | 4 | 1,346.97 | 1,072.42 | 353.00 | -274.55 | -719.41 |
| SESARM | GA | Harllee Branch | 709 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Harllee Branch | 709 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Harllee Branch | 709 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Harllee Branch | 709 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Jack McDonough | 710 | MB1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Jack McDonough | 710 | MB2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Kraft | 733 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Kraft | 733 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Kraft | 733 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | McIntosh (6124) | 6124 | 1 | 69.85 | 57.10 | 57.10 | -12.76 | 0 |
| SESARM | GA | Mitchell (GA) | 727 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Scherer | 6257 | 1 | 2,206.82 | 2,085.13 | 639.09 | -121.69 | -1446.04 |
| SESARM | GA | Scherer | 6257 | 2 | 2,317.24 | 2,167.89 | 656.87 | -149.35 | -1511.02 |
| SESARM | GA | Scherer | 6257 | 3 | 3,794.94 | 3,751.97 | 1,112.46 | -42.98 | -2639.51 |
| SESARM | GA | Scherer | 6257 | 4 | 3,635.50 | 3,493.04 | 1,095.07 | -142.45 | -2397.97 |
| SESARM | GA | Scherer | 6257 | G13001 | 640.21 |  |  | -640.21 | 0 |
| SESARM | GA | Wansley (6052) | 6052 | 1 | 916.28 | 728.49 | 461.38 | -187.79 | -267.11 |
| SESARM | GA | Wansley (6052) | 6052 | 2 | 531.90 | 427.71 | 323.65 | -104.19 | -104.05 |
| SESARM | GA | Yates | 728 | Y1BR | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Yates | 728 | Y2BR | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Yates | 728 | Y3BR | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Yates | 728 | Y4BR | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | GA | Yates | 728 | Y5BR | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Big Sandy | 1353 | BSU2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Cane Run | 1363 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Cane Run | 1363 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Cane Run | 1363 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Coleman | 1381 | C1 | 1,578.30 | 1,499.38 | 1,499.38 | -78.93 | 0 |
| SESARM | KY | Coleman | 1381 | C2 | 1,490.84 | 1,472.01 | 1,472.01 | -18.83 | 0 |
| SESARM | KY | Coleman | 1381 | C3 | 1,682.79 | 1,465.23 | 1,465.23 | -217.56 | 0 |
| SESARM | KY | D B Wilson | 6823 | W1 | 848.26 | 748.52 | 565.07 | -99.74 | -183.45 |
| SESARM | KY | E W Brown | 1355 | 1 | 482.37 | 404.87 | 404.87 | -77.5 | 0 |
| SESARM | KY | E W Brown | 1355 | 2 | 798.55 | 711.06 | 711.06 | -87.49 | 0 |
| SESARM | KY | E W Brown | 1355 | 3 | 377.26 | 337.47 | 337.47 | -39.79 | 0 |
| SESARM | KY | East Bend | 6018 | 2 | 1,915.82 | 1,711.35 | 763.30 | -204.47 | -948.05 |
| SESARM | KY | Elmer Smith | 1374 | 1 | 849.60 | 754.89 | 410.23 | -94.71 | -344.66 |
| SESARM | KY | Elmer Smith | 1374 | 2 | 2,057.47 | 1,797.93 | 1,415.72 | -259.54 | -382.22 |
| SESARM | KY | Ghent | 1356 | 1 | 1,017.96 | 904.15 | 492.05 | -113.81 | -412.11 |
| SESARM | KY | Ghent | 1356 | 2 | 2,360.46 | 2,091.05 | 2,091.05 | -269.41 | 0 |
| SESARM | KY | Ghent | 1356 | 3 | 1,550.13 | 1,373.02 | 228.21 | -177.11 | -1144.81 |
| SESARM | KY | Ghent | 1356 | 4 | 863.12 | 753.18 | 243.67 | -109.94 | -509.51 |
| SESARM | KY | Green River | 1357 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Green River | 1357 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | H L Spurlock | 6041 | 1 | 570.18 | 502.81 | 469.20 | -67.37 | -33.61 |
| SESARM | KY | H L Spurlock | 6041 | 2 | 973.15 | 983.73 | 897.26 | 10.58 | -86.47 |
| SESARM | KY | H L Spurlock | 6041 | 3 | 452.19 | 337.75 | 250.96 | -114.43 | -86.79 |
| SESARM | KY | H L Spurlock | 6041 | 4 | 445.86 | 443.59 | 410.14 | -2.27 | -33.45 |
| SESARM | KY | HMP&L Station 2 | 1382 | H1 | 324.19 | 291.20 | 238.76 | -32.98 | -52.44 |
| SESARM | KY | HMP&L Station 2 | 1382 | H2 | 341.22 | 298.78 | 259.22 | -42.44 | -39.56 |
| SESARM | KY | John S. Cooper | 1384 | 1 | 1,022.09 | 903.49 | 903.49 | -118.6 | 0 |
| SESARM | KY | John S. Cooper | 1384 | 2 | 350.29 | 176.86 | 176.86 | -173.43 | 0 |
| SESARM | KY | Mill Creek | 1364 | 1 | 2,040.75 | 1,874.70 | 1,874.70 | -166.05 | 0 |
| SESARM | KY | Mill Creek | 1364 | 2 | 2,180.97 | 2,167.97 | 2,167.97 | -12.99 | 0 |
| SESARM | KY | Mill Creek | 1364 | 3 | 411.58 | 381.03 | 290.60 | -30.55 | -90.43 |
| SESARM | KY | Mill Creek | 1364 | 4 | 1,196.60 | 1,043.95 | 383.03 | -152.65 | -660.92 |
| SESARM | KY | Paradise | 1378 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Paradise | 1378 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Paradise | 1378 | 3 | 2,655.82 | 2,277.86 | 1,364.90 | -377.96 | -912.96 |
| SESARM | KY | R D Green | 6639 | G1 | 1,348.22 | 1,330.21 | 1,330.21 | -18.01 | 0 |
| SESARM | KY | R D Green | 6639 | G2 | 1,214.06 | 1,228.80 | 1,228.80 | 14.74 | 0 |
| SESARM | KY | Robert Reid | 1383 | R1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Shawnee | 1379 | 1 | 1,354.98 | 119.65 | 119.65 | -1235.34 | 0 |
| SESARM | KY | Shawnee | 1379 | 10 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | Shawnee | 1379 | 2 | 1,366.91 | 1,210.19 | 1,210.19 | -156.72 | 0 |
| SESARM | KY | Shawnee | 1379 | 3 | 1,358.37 | 1,204.93 | 1,204.93 | -153.45 | 0 |
| SESARM | KY | Shawnee | 1379 | 4 | 1,336.99 | 118.13 | 118.13 | -1218.85 | 0 |
| SESARM | KY | Shawnee | 1379 | 5 | 1,515.39 | 1,342.73 | 1,342.73 | -172.66 | 0 |
| SESARM | KY | Shawnee | 1379 | 6 | 1,083.76 | 944.43 | 944.43 | -139.34 | 0 |
| SESARM | KY | Shawnee | 1379 | 7 | 1,163.31 | 1,031.39 | 1,031.39 | -131.92 | 0 |
| SESARM | KY | Shawnee | 1379 | 8 | 1,138.16 | 1,010.25 | 1,010.25 | -127.91 | 0 |
| SESARM | KY | Shawnee | 1379 | 9 | 1,022.13 | 903.44 | 903.44 | -118.68 | 0 |
| SESARM | KY | Trimble County | 6071 | 1 | 849.01 | 676.00 | 283.36 | -173.01 | -392.64 |
| SESARM | KY | Trimble County | 6071 | 2 | 712.76 | 580.40 | 533.71 | -132.36 | -46.69 |
| SESARM | KY | Tyrone | 1361 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | KY | William C. Dale | 1385 | 1 | 63.17 | 0.00 | 0.00 | -63.17 | 0 |
| SESARM | KY | William C. Dale | 1385 | 2 | 59.87 | 0.00 | 0.00 | -59.87 | 0 |
| SESARM | KY | William C. Dale | 1385 | 3 | 455.20 | 401.81 | 401.81 | -53.39 | 0 |
| SESARM | KY | William C. Dale | 1385 | 4 | 486.49 | 431.03 | 431.03 | -55.46 | 0 |
| SESARM | MS | Daniel Electric Generating Plant | 6073 | 1 | 1,072.43 | 932.38 | 932.38 | -140.04 | 0 |
| SESARM | MS | Daniel Electric Generating Plant | 6073 | 2 | 442.42 | 353.20 | 353.20 | -89.22 | 0 |
| SESARM | MS | R D Morrow Senior Generating Plant | 6061 | 1 | 999.94 | 793.68 | 793.68 | -206.27 | 0 |
| SESARM | MS | R D Morrow Senior Generating Plant | 6061 | 2 | 1,387.03 | 1,093.98 | 1,093.98 | -293.05 | 0 |
| SESARM | MS | Red Hills Generation Facility | 55076 | AA001 | 667.09 | 540.49 | 540.49 | -126.6 | 0 |
| SESARM | MS | Red Hills Generation Facility | 55076 | AA002 | 791.53 | 686.14 | 686.14 | -105.39 | 0 |
| SESARM | MS | Watson Electric Generating Plant | 2049 | 4 | 1,274.50 |  |  | -1274.5 | 0 |
| SESARM | MS | Watson Electric Generating Plant | 2049 | 5 | 1,578.15 |  |  | -1578.15 | 0 |
| SESARM | NC | Asheville | 2706 | 1 | 308.39 | 0.00 | 0.00 | -308.39 | 0 |
| SESARM | NC | Asheville | 2706 | 2 | 267.91 | 0.00 | 0.00 | -267.91 | 0 |
| SESARM | NC | Belews Creek | 8042 | 1 | 1,630.21 | 1,344.66 | 342.28 | -285.55 | -1002.38 |
| SESARM | NC | Belews Creek | 8042 | 2 | 1,734.67 | 1,506.84 | 523.29 | -227.83 | -983.56 |
| SESARM | NC | Buck | 2720 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Buck | 2720 | 9 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Cape Fear | 2708 | 5 |  | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Cape Fear | 2708 | 6 |  | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Cliffside | 2721 | 5 | 362.25 | 197.31 | 78.92 | -164.95 | -118.39 |
| SESARM | NC | Cliffside | 2721 | 6 | 649.73 | 522.84 | 477.88 | -126.89 | -44.96 |
| SESARM | NC | Dan River | 2723 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Dan River | 2723 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Dan River | 2723 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Elizabethtown Power | 10380 | UNIT1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Elizabethtown Power | 10380 | UNIT2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | G G Allen | 2718 | 1 | 47.14 | 0.00 | 0.00 | -47.14 | 0 |
| SESARM | NC | G G Allen | 2718 | 2 | 48.05 | 0.00 | 0.00 | -48.05 | 0 |
| SESARM | NC | G G Allen | 2718 | 3 | 107.39 | 0.00 | 0.00 | -107.39 | 0 |
| SESARM | NC | G G Allen | 2718 | 4 | 106.19 | 180.69 | 91.79 | 74.5 | -88.9 |
| SESARM | NC | G G Allen | 2718 | 5 | 94.98 | 136.58 | 87.05 | 41.61 | -49.53 |
| SESARM | NC | H F Lee Steam Electric Plant | 2709 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | H F Lee Steam Electric Plant | 2709 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | H F Lee Steam Electric Plant | 2709 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | L V Sutton | 2713 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | L V Sutton | 2713 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | L V Sutton | 2713 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Lumberton Power | 10382 | UNIT1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Lumberton Power | 10382 | UNIT2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Marshall | 2727 | 1 | 732.46 | 483.28 | 378.89 | -249.18 | -104.39 |
| SESARM | NC | Marshall | 2727 | 2 | 1,079.60 | 741.75 | 580.34 | -337.86 | -161.4 |
| SESARM | NC | Marshall | 2727 | 3 | 1,548.97 | 1,031.08 | 500.08 | -517.89 | -531.01 |
| SESARM | NC | Marshall | 2727 | 4 | 3,739.99 | 2,253.27 | 1,413.93 | -1486.72 | -839.34 |
| SESARM | NC | Mayo | 6250 | 1A | 927.87 | 451.66 | 153.06 | -476.21 | -298.6 |
| SESARM | NC | Mayo | 6250 | 1B | 867.17 | 409.55 | 139.70 | -457.63 | -269.85 |
| SESARM | NC | Riverbend | 2732 | 10 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Riverbend | 2732 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Riverbend | 2732 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Riverbend | 2732 | 9 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Roxboro | 2712 | 1 | 819.46 | 513.85 | 253.90 | -305.61 | -259.95 |
| SESARM | NC | Roxboro | 2712 | 2 | 1,330.58 | 749.40 | 253.47 | -581.18 | -495.92 |
| SESARM | NC | Roxboro | 2712 | 3A | 1,160.23 | 491.25 | 172.75 | -668.99 | -318.5 |
| SESARM | NC | Roxboro | 2712 | 3B | 1,080.96 | 459.48 | 165.41 | -621.48 | -294.07 |
| SESARM | NC | Roxboro | 2712 | 4A | 1,141.07 | 411.00 | 191.72 | -730.06 | -219.28 |
| SESARM | NC | Roxboro | 2712 | 4B | 1,043.97 | 370.54 | 172.85 | -673.43 | -197.69 |
| SESARM | NC | W H Weatherspoon | 2716 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | W H Weatherspoon | 2716 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | W H Weatherspoon | 2716 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | NC | Westmoreland Partners Roanoke Valley II | 54755 | 2 | 179.06 | 38.26 | 30.47 | -140.81 | -7.79 |
| SESARM | NC | Westmoreland-LG&E Roanoke Valley I | 54035 | 1 | 1,088.28 | 744.75 | 744.75 | -343.54 | 0 |
| SESARM | SC | Canadys Steam | 3280 | CAN1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Canadys Steam | 3280 | CAN2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Canadys Steam | 3280 | CAN3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Cope Station | 7210 | COP1 | 579.26 | 342.88 | 284.80 | -236.38 | -58.08 |
| SESARM | SC | Cross | 130 | 1 | 1,117.56 | 941.69 | 759.09 | -175.87 | -182.6 |
| SESARM | SC | Cross | 130 | 2 | 576.06 | 368.52 | 316.18 | -207.53 | -52.34 |
| SESARM | SC | Cross | 130 | 3 | 855.72 | 489.64 | 459.87 | -366.09 | -29.77 |
| SESARM | SC | Cross | 130 | 4 | 857.79 | 416.67 | 393.19 | -441.12 | -23.48 |
| SESARM | SC | Dolphus M Grainger | 3317 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Dolphus M Grainger | 3317 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | H B Robinson | 3251 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Jefferies | 3319 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Jefferies | 3319 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | McMeekin | 3287 | MCM1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | McMeekin | 3287 | MCM2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | W S Lee | 3264 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | W S Lee | 3264 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | SC | Wateree | 3297 | WAT1 | 585.73 | 351.14 | 210.94 | -234.59 | -140.2 |
| SESARM | SC | Wateree | 3297 | WAT2 | 618.67 | 345.97 | 199.49 | -272.7 | -146.48 |
| SESARM | SC | Williams | 3298 | WIL1 | 755.49 | 480.33 | 235.50 | -275.16 | -244.83 |
| SESARM | SC | Winyah | 6249 | 1 | 399.71 | 246.03 | 177.87 | -153.68 | -68.17 |
| SESARM | SC | Winyah | 6249 | 2 | 349.22 | 212.72 | 138.19 | -136.5 | -74.53 |
| SESARM | SC | Winyah | 6249 | 3 | 342.25 | 207.75 | 174.11 | -134.5 | -33.64 |
| SESARM | SC | Winyah | 6249 | 4 | 419.36 | 257.84 | 215.17 | -161.51 | -42.67 |
| SESARM | TN | Allen | 3393 | 1 | 706.62 | 0.00 | 0.00 | -706.62 | 0 |
| SESARM | TN | Allen | 3393 | 2 | 688.57 | 0.00 | 0.00 | -688.57 | 0 |
| SESARM | TN | Allen | 3393 | 3 | 754.55 | 0.00 | 0.00 | -754.55 | 0 |
| SESARM | TN | Bull Run | 3396 | 1 | 257.17 | 171.40 | 124.26 | -85.77 | -47.14 |
| SESARM | TN | Cumberland | 3399 | 1 | 1,141.53 | 982.86 | 934.79 | -158.67 | -48.06 |
| SESARM | TN | Cumberland | 3399 | 2 | 2,098.42 | 1,844.65 | 1,412.56 | -253.77 | -432.09 |
| SESARM | TN | Gallatin | 3403 | 1 | 449.82 | 170.96 | 170.96 | -278.86 | 0 |
| SESARM | TN | Gallatin | 3403 | 2 | 445.94 | 167.64 | 167.64 | -278.3 | 0 |
| SESARM | TN | Gallatin | 3403 | 3 | 539.44 | 204.66 | 204.66 | -334.77 | 0 |
| SESARM | TN | Gallatin | 3403 | 4 | 544.91 | 206.18 | 206.18 | -338.73 | 0 |
| SESARM | TN | John Sevier | 3405 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | John Sevier | 3405 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | John Sevier | 3405 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | John Sevier | 3405 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 10 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Johnsonville | 3406 | 9 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | TN | Kingston | 3407 | 1 | 138.71 | 120.94 | 87.96 | -17.76 | -32.98 |
| SESARM | TN | Kingston | 3407 | 2 | 61.43 | 51.46 | 41.79 | -9.97 | -9.67 |
| SESARM | TN | Kingston | 3407 | 3 | 132.81 | 116.20 | 85.78 | -16.61 | -30.42 |
| SESARM | TN | Kingston | 3407 | 4 | 130.59 | 114.54 | 89.93 | -16.05 | -24.61 |
| SESARM | TN | Kingston | 3407 | 5 | 124.66 | 103.43 | 81.94 | -21.24 | -21.48 |
| SESARM | TN | Kingston | 3407 | 6 | 58.90 | 46.81 | 37.49 | -12.08 | -9.32 |
| SESARM | TN | Kingston | 3407 | 7 | 105.52 | 91.13 | 68.62 | -14.39 | -22.51 |
| SESARM | TN | Kingston | 3407 | 8 | 56.48 | 45.81 | 37.23 | -10.66 | -8.58 |
| SESARM | TN | Kingston | 3407 | 9 | 93.92 | 80.58 | 61.44 | -13.33 | -19.15 |
| SESARM | VA | Altavista Power Station | 10773 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Altavista Power Station | 10773 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Birchwood Power Facility | 54304 | 001 | 143.26 | 93.45 | 86.09 | -49.81 | -7.36 |
| SESARM | VA | Chesapeake Energy Center | 3803 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Chesapeake Energy Center | 3803 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Chesapeake Energy Center | 3803 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Chesapeake Energy Center | 3803 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Chesterfield Power Station | 3797 | 3 | 157.80 | 109.99 | 109.99 | -47.81 | 0 |
| SESARM | VA | Chesterfield Power Station | 3797 | 4 | 156.08 | 101.00 | 49.19 | -55.08 | -51.81 |
| SESARM | VA | Chesterfield Power Station | 3797 | 5 | 242.28 | 158.04 | 48.84 | -84.23 | -109.21 |
| SESARM | VA | Chesterfield Power Station | 3797 | 6 | 473.77 | 291.37 | 178.21 | -182.41 | -113.16 |
| SESARM | VA | Clinch River | 3775 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Clover Power Station | 7213 | 1 | 2,579.04 | 1,528.54 | 1,309.68 | -1050.5 | -218.86 |
| SESARM | VA | Clover Power Station | 7213 | 2 | 2,649.96 | 1,615.27 | 1,305.32 | -1034.69 | -309.94 |
| SESARM | VA | Cogentrix-Hopewell | 10377 | BLR01A | 141.63 | 86.94 | 86.94 | -54.69 | 0 |
| SESARM | VA | Cogentrix-Hopewell | 10377 | BLR01B | 106.99 | 65.57 | 65.57 | -41.41 | 0 |
| SESARM | VA | Cogentrix-Hopewell | 10377 | BLR01C | 143.29 | 86.26 | 86.26 | -57.03 | 0 |
| SESARM | VA | Cogentrix-Hopewell | 10377 | BLR02A | 124.72 | 75.54 | 75.54 | -49.18 | 0 |
| SESARM | VA | Cogentrix-Hopewell | 10377 | BLR02B | 83.28 | 51.39 | 51.39 | -31.89 | 0 |
| SESARM | VA | Cogentrix-Hopewell | 10377 | BLR02C | 80.90 | 51.13 | 51.13 | -29.78 | 0 |
| SESARM | VA | Cogentrix-Portsmouth | 10071 | BLR01A | 32.91 | 0.00 | 0.00 | -32.91 | 0 |
| SESARM | VA | Cogentrix-Portsmouth | 10071 | BLR01B | 29.42 | 0.00 | 0.00 | -29.42 | 0 |
| SESARM | VA | Cogentrix-Portsmouth | 10071 | BLR01C | 30.15 | 0.00 | 0.00 | -30.15 | 0 |
| SESARM | VA | Cogentrix-Portsmouth | 10071 | BLR02A | 32.18 | 0.00 | 0.00 | -32.18 | 0 |
| SESARM | VA | Cogentrix-Portsmouth | 10071 | BLR02B | 27.83 | 0.00 | 0.00 | -27.83 | 0 |
| SESARM | VA | Cogentrix-Portsmouth | 10071 | BLR02C | 27.69 | 0.00 | 0.00 | -27.69 | 0 |
| SESARM | VA | Glen Lyn | 3776 | 51 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Glen Lyn | 3776 | 52 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Glen Lyn | 3776 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Hopewell Power Station | 10771 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Hopewell Power Station | 10771 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Mecklenburg Power Station | 52007 | 1 | 90.10 | 61.11 | 61.11 | -28.99 | 0 |
| SESARM | VA | Mecklenburg Power Station | 52007 | 2 | 93.46 | 64.59 | 64.59 | -28.87 | 0 |
| SESARM | VA | Mirant Potomac River | 3788 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Mirant Potomac River | 3788 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Mirant Potomac River | 3788 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Mirant Potomac River | 3788 | 4 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Mirant Potomac River | 3788 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Southampton Power Station | 10774 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Southampton Power Station | 10774 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR01A | 199.75 | 125.22 | 107.19 | -74.53 | -18.03 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR01B | 219.23 | 134.72 | 115.09 | -84.52 | -19.63 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR02A | 223.93 | 136.90 | 115.33 | -87.02 | -21.57 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR02B | 223.00 | 135.22 | 114.04 | -87.78 | -21.18 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR03A | 213.66 | 132.90 | 118.09 | -80.76 | -14.81 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR03B | 224.51 | 135.70 | 121.01 | -88.81 | -14.69 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR04A | 183.11 | 112.31 | 106.67 | -70.8 | -5.64 |
| SESARM | VA | Spruance Genco, LLC | 54081 | BLR04B | 172.24 | 106.28 | 102.00 | -65.95 | -4.28 |
| SESARM | VA | Virginia City Hybrid Energy Center | 56808 | 1 | 454.85 | 391.13 | 391.13 | -63.73 | 0 |
| SESARM | VA | Virginia City Hybrid Energy Center | 56808 | 2 | 474.21 | 395.07 | 395.07 | -79.13 | 0 |
| SESARM | VA | Yorktown Power Station | 3809 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | VA | Yorktown Power Station | 3809 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Albright Power Station | 3942 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Albright Power Station | 3942 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Albright Power Station | 3942 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Fort Martin Power Station | 3943 | 1 | 3,949.04 | 3,397.71 | 3,397.71 | -551.33 | 0 |
| SESARM | WV | Fort Martin Power Station | 3943 | 2 | 4,015.95 | 3,643.97 | 3,643.97 | -371.98 | 0 |
| SESARM | WV | Grant Town Power Plant | 10151 | 1A | 495.62 | 496.39 | 113.81 | 0.77 | -382.58 |
| SESARM | WV | Grant Town Power Plant | 10151 | 1B | 484.20 | 486.92 | 486.92 | 2.72 | 0 |
| SESARM | WV | Harrison Power Station | 3944 | 1 | 3,306.02 | 2,995.54 | 728.24 | -310.48 | -2267.29 |
| SESARM | WV | Harrison Power Station | 3944 | 2 | 3,362.78 | 2,967.34 | 798.93 | -395.44 | -2168.41 |
| SESARM | WV | Harrison Power Station | 3944 | 3 | 3,322.18 | 3,015.58 | 640.10 | -306.6 | -2375.48 |
| SESARM | WV | John E Amos | 3935 | 1 | 766.18 | 630.45 | 446.68 | -135.73 | -183.77 |
| SESARM | WV | John E Amos | 3935 | 2 | 869.31 | 692.51 | 431.61 | -176.8 | -260.9 |
| SESARM | WV | John E Amos | 3935 | 3 | 1,033.59 | 979.33 | 979.33 | -54.26 | 0 |
| SESARM | WV | Kammer | 3947 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Kammer | 3947 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Kammer | 3947 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Kanawha River | 3936 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Kanawha River | 3936 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Longview Power | 56671 | 001 | 930.30 | 844.91 | 842.31 | -85.39 | -2.6 |
| SESARM | WV | Mitchell (WV) | 3948 | 1 | 635.98 | 601.13 | 601.13 | -34.86 | 0 |
| SESARM | WV | Mitchell (WV) | 3948 | 2 | 939.43 | 876.58 | 876.58 | -62.86 | 0 |
| SESARM | WV | Mount Storm Power Station | 3954 | 1 | 771.17 | 451.35 | 328.95 | -319.82 | -122.4 |
| SESARM | WV | Mount Storm Power Station | 3954 | 2 | 628.09 | 375.45 | 227.05 | -252.65 | -148.39 |
| SESARM | WV | Mount Storm Power Station | 3954 | 3 | 644.17 | 388.21 | 345.20 | -255.96 | -43.01 |
| SESARM | WV | Mountaineer (1301) | 6264 | 1 | 1,425.37 | 1,439.80 | 1,040.68 | 14.43 | -399.12 |
| SESARM | WV | Phil Sporn | 3938 | 11 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Phil Sporn | 3938 | 21 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Phil Sporn | 3938 | 31 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Phil Sporn | 3938 | 41 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Phil Sporn | 3938 | 51 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Pleasants Power Station | 6004 | 1 | 2,341.15 | 2,086.79 | 588.54 | -254.37 | -1498.24 |
| SESARM | WV | Pleasants Power Station | 6004 | 2 | 1,836.10 | 1,525.39 | 474.37 | -310.71 | -1051.02 |
| SESARM | WV | Rivesville Power Station | 3945 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Rivesville Power Station | 3945 | 8 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Willow Island Power Station | 3946 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| SESARM | WV | Willow Island Power Station | 3946 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | AR | Flint Creek Power Plant | 6138 | 1 | 2,735.72 | 3,265.34 | 3,265.34 | 529.62 | 0 |
| CENSARA | AR | Independence | 6641 | 1 | 4,022.55 | 3,990.19 | 3,990.19 | -32.36 | 0 |
| CENSARA | AR | Independence | 6641 | 2 | 4,350.52 | 4,248.96 | 4,248.96 | -101.56 | 0 |
| CENSARA | AR | Independence | 6641 | G05001 | 680.18 |  |  | -680.18 | 0 |
| CENSARA | AR | John W. Turk Jr. Power Plant | 56564 | SN-01 | 492.06 | 1,308.91 | 534.87 | 816.86 | -774.05 |
| CENSARA | AR | Plum Point Energy Station | 56456 | 1 | 1,085.63 | 986.50 | 897.08 | -99.13 | -89.43 |
| CENSARA | AR | White Bluff | 6009 | 1 | 3,795.37 | 3,650.93 | 3,650.93 | -144.44 | 0 |
| CENSARA | AR | White Bluff | 6009 | 2 | 5,516.12 | 5,424.70 | 5,424.70 | -91.42 | 0 |
| CENSARA | AR | White Bluff | 6009 | G05002 | 592.89 |  |  | -592.89 | 0 |
| CENSARA | IA | Burlington (IA) | 1104 | 1 | 754.52 |  |  | -754.52 | 0 |
| CENSARA | IA | Dubuque | 1046 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Dubuque | 1046 | 5 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Dubuque | 1046 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Fair Station | 1218 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | George Neal North | 1091 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | George Neal North | 1091 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | George Neal North | 1091 | 3 | 2,093.38 | 1,982.31 | 1,982.31 | -111.07 | 0 |
| CENSARA | IA | George Neal South | 7343 | 4 | 2,851.96 | 2,659.45 | 2,621.66 | -192.51 | -37.79 |
| CENSARA | IA | Lansing | 1047 | 3 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Lansing | 1047 | 4 | 185.77 | 261.63 | 261.63 | 75.85 | 0 |
| CENSARA | IA | Louisa | 6664 | 101 | 1,988.44 | 1,835.42 | 1,835.42 | -153.02 | 0 |
| CENSARA | IA | Muscatine | 1167 | 8 | 1,414.62 | 1,301.80 | 1,301.80 | -112.82 | 0 |
| CENSARA | IA | Muscatine | 1167 | 9 | 263.95 | 217.18 | 217.18 | -46.77 | 0 |
| CENSARA | IA | Ottumwa | 6254 | 1 | 1,816.14 | 757.99 | 757.99 | -1058.15 | 0 |
| CENSARA | IA | Pella | 1175 | 6 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Pella | 1175 | 7 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Prairie Creek | 1073 | 3 | 191.68 |  |  | -191.68 | 0 |
| CENSARA | IA | Prairie Creek | 1073 | 4 | 930.39 |  |  | -930.39 | 0 |
| CENSARA | IA | Sutherland | 1077 | 1 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Sutherland | 1077 | 3 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Walter Scott Jr. Energy Center | 1082 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Walter Scott Jr. Energy Center | 1082 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | IA | Walter Scott Jr. Energy Center | 1082 | 3 | 1,760.39 | 1,254.03 | 1,254.03 | -506.35 | 0 |
| CENSARA | IA | Walter Scott Jr. Energy Center | 1082 | 4 | 973.25 | 885.84 | 839.72 | -87.41 | -46.12 |
| CENSARA | KS | Holcomb | 108 | SGU1 | 2,453.26 | 1,278.98 | 1,278.98 | -1174.29 | 0 |
| CENSARA | KS | Jeffrey Energy Center | 6068 | 1 | 114.66 | 865.59 | 865.59 | 750.93 | 0 |
| CENSARA | KS | Jeffrey Energy Center | 6068 | 2 | 413.88 | 1,213.20 | 958.91 | 799.31 | -254.29 |
| CENSARA | KS | Jeffrey Energy Center | 6068 | 3 | 627.82 | 2,192.42 | 2,020.53 | 1564.6 | -171.89 |
| CENSARA | KS | La Cygne | 1241 | 1 | 848.86 | 1,102.73 | 930.43 | 253.87 | -172.3 |
| CENSARA | KS | La Cygne | 1241 | 2 | 557.41 | 4,119.87 | 1,395.84 | 3562.45 | -2724.03 |
| CENSARA | KS | Lawrence Energy Center | 1250 | 3 | 159.84 | 0.00 | 0.00 | -159.84 | 0 |
| CENSARA | KS | Lawrence Energy Center | 1250 | 4 | 757.29 | 462.55 | 462.55 | -294.74 | 0 |
| CENSARA | KS | Lawrence Energy Center | 1250 | 5 | 1,669.62 | 1,353.02 | 1,353.02 | -316.6 | 0 |
| CENSARA | KS | Nearman Creek | 6064 | N1 | 2,254.85 | 131.95 | 131.95 | -2122.9 | 0 |
| CENSARA | KS | Quindaro | 1295 | 1 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | KS | Quindaro | 1295 | 2 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | KS | Riverton | 1239 | 39 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | KS | Riverton | 1239 | 40 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | KS | Tecumseh Energy Center | 1252 | 10 | 382.71 | 0.00 | 0.00 | -382.71 | 0 |
| CENSARA | KS | Tecumseh Energy Center | 1252 | 9 | 220.47 | 263.58 | 263.58 | 43.11 | 0 |
| CENSARA | LA | Big Cajun 2 | 6055 | 2B1 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | LA | Big Cajun 2 | 6055 | 2B2 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | LA | Big Cajun 2 | 6055 | 2B3 |  | 0.00 | 0.00 | 0 | 0 |
| CENSARA | LA | Big Cajun 2 | 6055 | G22001 | 780.23 |  |  | -780.23 | 0 |
| CENSARA | LA | Dolet Hills Power Station | 51 | 1 | 2,576.22 | 3,113.79 | 2,994.53 | 537.57 | -119.26 |
| CENSARA | LA | Nelson Industrial Steam Company | 50030 | 1A | 438.13 | 445.79 | 445.79 | 7.66 | 0 |
| CENSARA | LA | Nelson Industrial Steam Company | 50030 | 2A | 454.07 | 465.49 | 465.49 | 11.42 | 0 |
| CENSARA | LA | R S Nelson | 1393 | 6 | 1,986.38 | 1,995.91 | 1,995.91 | 9.53 | 0 |
| CENSARA | LA | R S Nelson | 1393 | G22002 | 269.91 |  |  | -269.91 | 0 |
| CENSARA | LA | Rodemacher Power Station (6190) | 6190 | 2 | 1,216.14 | 1,448.43 | 1,362.68 | 232.29 | -85.75 |
| CENSARA | LA | Rodemacher Power Station (6190) | 6190 | 3-1 | 183.08 | 219.37 | 157.35 | 36.29 | -62.02 |
| CENSARA | LA | Rodemacher Power Station (6190) | 6190 | 3-2 | 238.31 | 285.07 | 229.43 | 46.76 | -55.64 |
| CENSARA | MO | Asbury | 2076 | 1 | 686.15 | 1,638.21 | 375.97 | 952.05 | -1262.24 |
| CENSARA | MO | Blue Valley | 2132 | 3 | 36.31 | 42.66 | 42.66 | 6.36 | 0 |
| CENSARA | MO | Chamois Power Plant | 2169 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | MO | Columbia | 2123 | 6 | 64.16 | 67.43 | 67.43 | 3.27 | 0 |
| CENSARA | MO | Columbia | 2123 | 7 | 80.90 | 85.41 | 85.41 | 4.51 | 0 |
| CENSARA | MO | Hawthorn | 2079 | 5A | 718.61 | 868.65 | 854.37 | 150.04 | -14.28 |
| CENSARA | MO | Iatan | 6065 | 1 | 774.75 | 898.60 | 813.80 | 123.85 | -84.8 |
| CENSARA | MO | Iatan | 6065 | 2 | 655.81 | 688.76 | 688.76 | 32.95 | 0 |
| CENSARA | MO | James River | 2161 | 3 | 72.53 | 40.53 | 40.53 | -32 | 0 |
| CENSARA | MO | James River | 2161 | 4 | 98.69 | 155.71 | 155.71 | 57.01 | 0 |
| CENSARA | MO | James River | 2161 | 5 | 246.38 | 303.79 | 303.79 | 57.41 | 0 |
| CENSARA | MO | John Twitty Energy Center | 6195 | 1 | 309.81 | 367.30 | 317.52 | 57.49 | -49.78 |
| CENSARA | MO | John Twitty Energy Center | 6195 | 2 | 273.32 | 388.87 | 289.71 | 115.55 | -99.16 |
| CENSARA | MO | Labadie | 2103 | 1 | 1,408.52 | 1,439.45 | 1,439.45 | 30.93 | 0 |
| CENSARA | MO | Labadie | 2103 | 2 | 1,549.90 | 1,613.54 | 1,613.54 | 63.64 | 0 |
| CENSARA | MO | Labadie | 2103 | 3 | 1,465.24 | 1,495.96 | 1,495.96 | 30.72 | 0 |
| CENSARA | MO | Labadie | 2103 | 4 | 1,577.54 | 1,573.73 | 1,573.73 | -3.81 | 0 |
| CENSARA | MO | Lake Road | 2098 | 6 | 719.03 | 850.18 | 850.18 | 131.15 | 0 |
| CENSARA | MO | Meramec | 2104 | 1 | 268.13 | 278.97 | 278.97 | 10.84 | 0 |
| CENSARA | MO | Meramec | 2104 | 2 | 315.36 | 330.01 | 330.01 | 14.65 | 0 |
| CENSARA | MO | Meramec | 2104 | 3 | 927.96 | 973.32 | 973.32 | 45.35 | 0 |
| CENSARA | MO | Meramec | 2104 | 4 | 1,347.72 | 1,378.53 | 1,378.53 | 30.81 | 0 |
| CENSARA | MO | Montrose | 2080 | 1 | 731.11 | 786.01 | 786.01 | 54.9 | 0 |
| CENSARA | MO | Montrose | 2080 | 2 | 491.62 | 358.36 | 358.36 | -133.25 | 0 |
| CENSARA | MO | Montrose | 2080 | 3 | 955.92 | 758.18 | 758.18 | -197.74 | 0 |
| CENSARA | MO | New Madrid Power Plant | 2167 | 1 | 5,500.34 | 1,862.73 | 1,111.43 | -3637.61 | -751.3 |
| CENSARA | MO | New Madrid Power Plant | 2167 | 2 | 2,337.76 | 1,437.15 | 901.57 | -900.61 | -535.58 |
| CENSARA | MO | Rush Island | 6155 | 1 | 968.48 | 1,001.64 | 1,001.64 | 33.16 | 0 |
| CENSARA | MO | Rush Island | 6155 | 2 | 1,118.01 | 1,147.47 | 1,147.47 | 29.46 | 0 |
| CENSARA | MO | Sibley | 2094 | 1 | 328.92 | 313.60 | 277.28 | -15.32 | -36.32 |
| CENSARA | MO | Sibley | 2094 | 2 | 218.57 | 236.26 | 223.42 | 17.68 | -12.83 |
| CENSARA | MO | Sibley | 2094 | 3 | 753.99 | 1,012.64 | 517.50 | 258.65 | -495.14 |
| CENSARA | MO | Sikeston | 6768 | 1 | 1,159.98 | 1,304.30 | 623.77 | 144.32 | -680.53 |
| CENSARA | MO | Sioux | 2107 | 1 | 1,589.98 | 1,498.66 | 1,498.66 | -91.32 | 0 |
| CENSARA | MO | Sioux | 2107 | 2 | 2,162.81 | 2,155.35 | 2,155.35 | -7.47 | 0 |
| CENSARA | MO | Thomas Hill Energy Center | 2168 | MB1 | 853.65 | 551.00 | 439.88 | -302.65 | -111.12 |
| CENSARA | MO | Thomas Hill Energy Center | 2168 | MB2 | 3,029.93 | 685.58 | 657.02 | -2344.35 | -28.57 |
| CENSARA | MO | Thomas Hill Energy Center | 2168 | MB3 | 2,204.14 | 2,091.19 | 1,674.70 | -112.95 | -416.5 |
| CENSARA | NE | Gerald Gentleman Station | 6077 | 1 | 3,373.24 | 3,155.26 | 3,155.26 | -217.97 | 0 |
| CENSARA | NE | Gerald Gentleman Station | 6077 | 2 | 6,031.98 | 5,595.27 | 5,595.27 | -436.71 | 0 |
| CENSARA | NE | Gerald Whelan Energy Center | 60 | 1 | 588.35 | 544.07 | 544.07 | -44.28 | 0 |
| CENSARA | NE | Gerald Whelan Energy Center | 60 | 2 | 147.74 | 140.00 | 124.85 | -7.74 | -15.15 |
| CENSARA | NE | Lon D Wright Power Plant | 2240 | 8 | 296.18 | 277.37 | 277.37 | -18.81 | 0 |
| CENSARA | NE | Nebraska City Station | 6096 | 1 | 3,059.06 | 2,850.10 | 2,850.10 | -208.96 | 0 |
| CENSARA | NE | Nebraska City Station | 6096 | 2 | 955.61 | 884.89 | 778.84 | -70.72 | -106.05 |
| CENSARA | NE | North Omaha Station | 2291 | 1 | 568.82 | 532.33 | 532.33 | -36.49 | 0 |
| CENSARA | NE | North Omaha Station | 2291 | 2 | 618.00 | 579.93 | 579.93 | -38.07 | 0 |
| CENSARA | NE | North Omaha Station | 2291 | 3 | 656.02 | 614.68 | 614.68 | -41.34 | 0 |
| CENSARA | NE | North Omaha Station | 2291 | 4 | 793.15 | 742.09 | 742.09 | -51.06 | 0 |
| CENSARA | NE | North Omaha Station | 2291 | 5 | 1,548.40 | 1,395.24 | 1,395.24 | -153.16 | 0 |
| CENSARA | NE | Platte | 59 | 1 | 745.21 | 698.32 | 698.32 | -46.89 | 0 |
| CENSARA | NE | Sheldon | 2277 | 1 | 2,507.86 | 2,334.45 | 2,334.45 | -173.41 | 0 |
| CENSARA | NE | Sheldon | 2277 | 2 | 1,765.64 | 1,622.47 | 1,622.47 | -143.16 | 0 |
| CENSARA | OK | AES Shady Point | 10671 | 1A |  | 264.57 | 264.57 | 264.57 | 0 |
| CENSARA | OK | AES Shady Point | 10671 | 1B |  | 220.13 | 220.13 | 220.13 | 0 |
| CENSARA | OK | AES Shady Point | 10671 | 2A |  | 244.41 | 244.41 | 244.41 | 0 |
| CENSARA | OK | AES Shady Point | 10671 | 2B |  | 249.38 | 249.38 | 249.38 | 0 |
| CENSARA | OK | Grand River Dam Authority | 165 | 1 | 3,895.39 | 0.00 | 0.00 | -3895.39 | 0 |
| CENSARA | OK | Grand River Dam Authority | 165 | 2 | 4,211.51 | 2,132.23 | 2,132.23 | -2079.29 | 0 |
| CENSARA | OK | Hugo | 6772 | 1 | 1,358.68 | 1,611.72 | 1,611.72 | 253.04 | 0 |
| CENSARA | OK | Muskogee | 2952 | 4 | 3,258.29 | 0.00 | 0.00 | -3258.29 | 0 |
| CENSARA | OK | Muskogee | 2952 | 5 | 2,821.75 | 0.00 | 0.00 | -2821.75 | 0 |
| CENSARA | OK | Muskogee | 2952 | 6 | 2,542.99 | 2,948.76 | 2,948.76 | 405.77 | 0 |
| CENSARA | OK | Northeastern | 2963 | 3313 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | OK | Northeastern | 2963 | 3314 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | OK | Sooner | 6095 | 1 | 3,039.04 | 1,331.39 | 1,331.39 | -1707.65 | 0 |
| CENSARA | OK | Sooner | 6095 | 2 | 2,871.75 | 1,430.31 | 1,430.31 | -1441.44 | 0 |
| CENSARA | TX | AES Deepwater, Inc. | 10670 | 01001 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | TX | Big Brown | 3497 | 1 | 1,323.14 | 1,138.53 | 1,085.87 | -184.61 | -52.67 |
| CENSARA | TX | Big Brown | 3497 | 2 | 1,596.60 | 1,373.94 | 1,332.99 | -222.66 | -40.95 |
| CENSARA | TX | Coleto Creek | 6178 | 1 | 1,140.00 | 981.04 | 981.04 | -158.95 | 0 |
| CENSARA | TX | Gibbons Creek Steam Electric Station | 6136 | 1 | 1,017.53 | 875.64 | 875.64 | -141.89 | 0 |
| CENSARA | TX | H W Pirkey Power Plant | 7902 | 1 | 2,143.03 | 2,564.90 | 2,564.90 | 421.87 | 0 |
| CENSARA | TX | Harrington Station | 6193 | 061B | 756.80 | 903.25 | 903.25 | 146.45 | 0 |
| CENSARA | TX | Harrington Station | 6193 | 062B | 728.86 | 870.88 | 870.88 | 142.02 | 0 |
| CENSARA | TX | Harrington Station | 6193 | 063B | 723.24 | 863.52 | 863.52 | 140.28 | 0 |
| CENSARA | TX | J K Spruce | 7097 | \*\*1 | 1,425.63 | 1,226.64 | 1,226.64 | -198.98 | 0 |
| CENSARA | TX | J K Spruce | 7097 | \*\*2 | 659.92 | 567.88 | 538.03 | -92.04 | -29.85 |
| CENSARA | TX | J T Deely | 6181 | 1 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | TX | J T Deely | 6181 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | TX | Limestone | 298 | LIM1 | 3,469.44 | 2,985.51 | 2,985.51 | -483.93 | 0 |
| CENSARA | TX | Limestone | 298 | LIM2 | 3,930.06 | 3,381.80 | 3,381.80 | -548.26 | 0 |
| CENSARA | TX | Martin Lake | 6146 | 1 | 2,905.19 | 2,500.00 | 2,500.00 | -405.18 | 0 |
| CENSARA | TX | Martin Lake | 6146 | 2 | 2,679.07 | 2,305.38 | 2,305.38 | -373.69 | 0 |
| CENSARA | TX | Martin Lake | 6146 | 3 | 2,606.57 | 2,242.89 | 2,242.89 | -363.68 | 0 |
| CENSARA | TX | Monticello | 6147 | 1 | 1,428.28 | 1,229.09 | 1,229.09 | -199.19 | 0 |
| CENSARA | TX | Monticello | 6147 | 2 | 1,046.25 | 900.34 | 873.72 | -145.91 | -26.62 |
| CENSARA | TX | Monticello | 6147 | 3 | 2,272.29 | 1,955.56 | 1,661.60 | -316.74 | -293.96 |
| CENSARA | TX | Oak Grove 1 | 6180 | 1 | 1,217.23 | 1,047.42 | 1,047.42 | -169.81 | 0 |
| CENSARA | TX | Oak Grove 2 | 6180 | 2 | 949.45 | 816.89 | 816.89 | -132.56 | 0 |
| CENSARA | TX | Oklaunion Power Station | 127 | 1 | 2,864.17 | 2,464.84 | 2,464.84 | -399.32 | 0 |
| CENSARA | TX | Sam Seymour | 6179 | 1 | 1,290.91 | 1,110.90 | 1,110.90 | -180.01 | 0 |
| CENSARA | TX | Sam Seymour | 6179 | 2 | 1,297.39 | 1,116.53 | 1,116.53 | -180.86 | 0 |
| CENSARA | TX | Sam Seymour | 6179 | 3 | 892.87 | 768.38 | 768.38 | -124.49 | 0 |
| CENSARA | TX | San Miguel | 6183 | SM-1 | 1,631.06 | 1,403.50 | 1,403.50 | -227.56 | 0 |
| CENSARA | TX | Sandow | 6648 | 4 | 684.10 | 588.64 | 588.64 | -95.46 | 0 |
| CENSARA | TX | Sandow 5 | 52071 | 5A | 362.43 | 311.85 | 289.91 | -50.58 | -21.94 |
| CENSARA | TX | Sandow 5 | 52071 | 5B | 275.44 | 237.00 | 223.35 | -38.43 | -13.65 |
| CENSARA | TX | Sandy Creek | 56611 | S01 | 728.79 | 468.51 | 413.33 | -260.28 | -55.18 |
| CENSARA | TX | Tolk Station | 6194 | 171B | 2,146.47 | 2,566.55 | 2,566.55 | 420.08 | 0 |
| CENSARA | TX | Tolk Station | 6194 | 172B | 1,254.63 | 1,494.98 | 1,494.98 | 240.34 | 0 |
| CENSARA | TX | Twin Oaks Power, LP | 7030 | U1 | 379.69 | 326.71 | 211.12 | -52.98 | -115.6 |
| CENSARA | TX | Twin Oaks Power, LP | 7030 | U2 | 525.66 | 452.33 | 272.94 | -73.33 | -179.39 |
| CENSARA | TX | W A Parish | 3470 | WAP5 | 533.41 | 459.04 | 327.23 | -74.37 | -131.82 |
| CENSARA | TX | W A Parish | 3470 | WAP6 | 732.56 | 630.43 | 441.40 | -102.13 | -189.03 |
| CENSARA | TX | W A Parish | 3470 | WAP7 | 403.27 | 347.04 | 280.05 | -56.23 | -66.99 |
| CENSARA | TX | W A Parish | 3470 | WAP8 | 535.84 | 461.11 | 382.07 | -74.72 | -79.04 |
| CENSARA | TX | Welsh Power Plant | 6139 | 1 | 2,229.21 | 2,664.53 | 2,664.53 | 435.32 | 0 |
| CENSARA | TX | Welsh Power Plant | 6139 | 2 | 0.00 | 0.00 | 0.00 | 0 | 0 |
| CENSARA | TX | Welsh Power Plant | 6139 | 3 | 1,986.22 | 2,377.26 | 2,377.26 | 391.04 | 0 |

1. 20% most impaired days are based on the draft IMPROVE AEROSOL, RHR III methodology used to calculate visibility impairment available in the Federal Land Manager Environmental Database (FED) database as of June 8, 2017 in accordance with the new definitions of impairment in regional haze regulatory framework [↑](#footnote-ref-2)
2. Mid-Atlantic Northeast Visibility Union, “Contribution Assessment Preliminary Inventory Analysis.” [↑](#footnote-ref-3)
3. US EPA, “Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards Final Rule.” [↑](#footnote-ref-4)
4. South Coast Air Quality Management District, “Petition to EPA for Rulemaking to Adopt Ultra-Low NOx Exhaust Emission Standards for On-Road Heavy-Duty Trucks and Engines.” [↑](#footnote-ref-5)
5. Fisher, “The Effect of Tall Stacks on the Long Range Transport of Air Pollutants.” [↑](#footnote-ref-6)
6. Trimble, “Air Quality: Information on Tall Smokestacks and Their Contribution to Interstate Transport of Air Pollution.” [↑](#footnote-ref-7)
7. US EPA, “EGU NOx Mitigation Strategies Final Rule TSD.” [↑](#footnote-ref-8)
8. Ibid. [↑](#footnote-ref-9)
9. Ibid. [↑](#footnote-ref-10)
10. Vinciguerra et al., “Expected Ozone Benefits of Reducing Nitrogen Oxide (NOx) Emissions from Coal-Fired Electricity Generating Units in the Eastern United States.” [↑](#footnote-ref-11)
11. AMEC, “Software Technical Documentation for Software to Estimate Future Activity and Air Emissions from Electric Generating Units (EGUs).” [↑](#footnote-ref-12)
12. McDill, McCusker, and Sabo, “Technical Support Document: Emission Inventory Development for 2011, 2018, and 2028 for the Northeastern U.S. Alpha 2 Version,” 2. [↑](#footnote-ref-13)
13. ERTAC Workgroup, “Documentation of ERTAC EGU CONUS Versions 2.6.” [↑](#footnote-ref-14)
14. All versions of the inputs were processed using v1.01 of the ERTAC EGU code. [↑](#footnote-ref-15)