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

August 29, 2017
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 (SO_2) emissions. The reductions achieved led to vast improvements in visibility at the MANE-VU Federal Class I Areas due to reduced sulfates formed from SO_2 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 (NO_X) 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 NO_X emission controls to comply with ozone season trading programs; consequently, emissions of NO_X 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] 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

[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

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

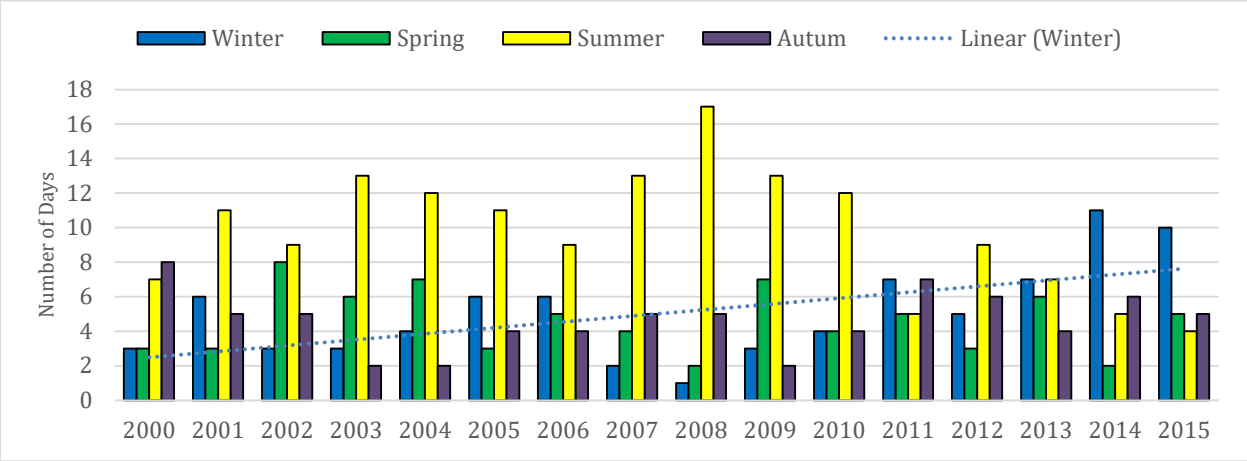


Figure 2: Trends in seasonality of 20% most impaired days at Moosehorn NWR

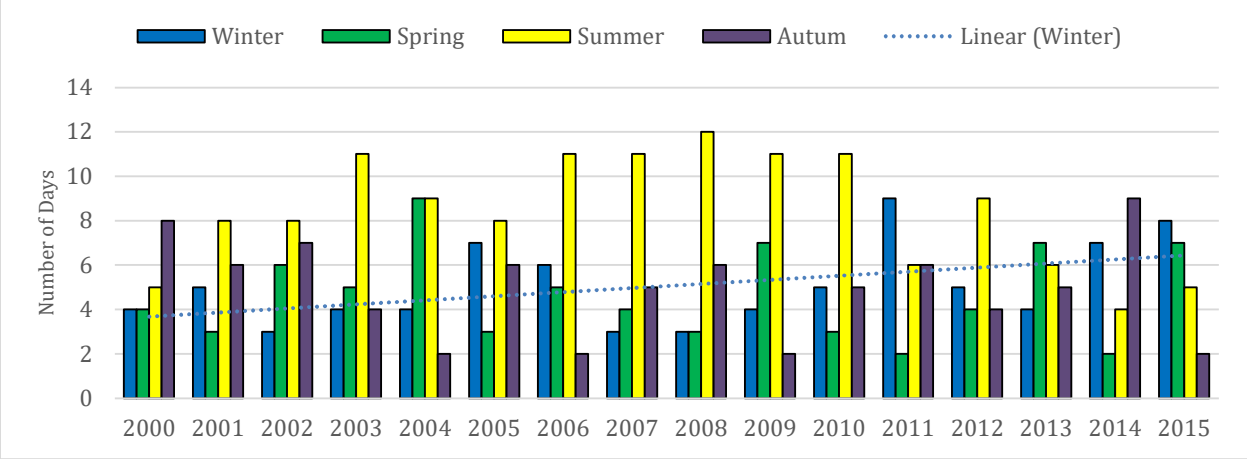


Figure 3: Trends in seasonality of 20% most impaired days at Lye Brook Wilderness

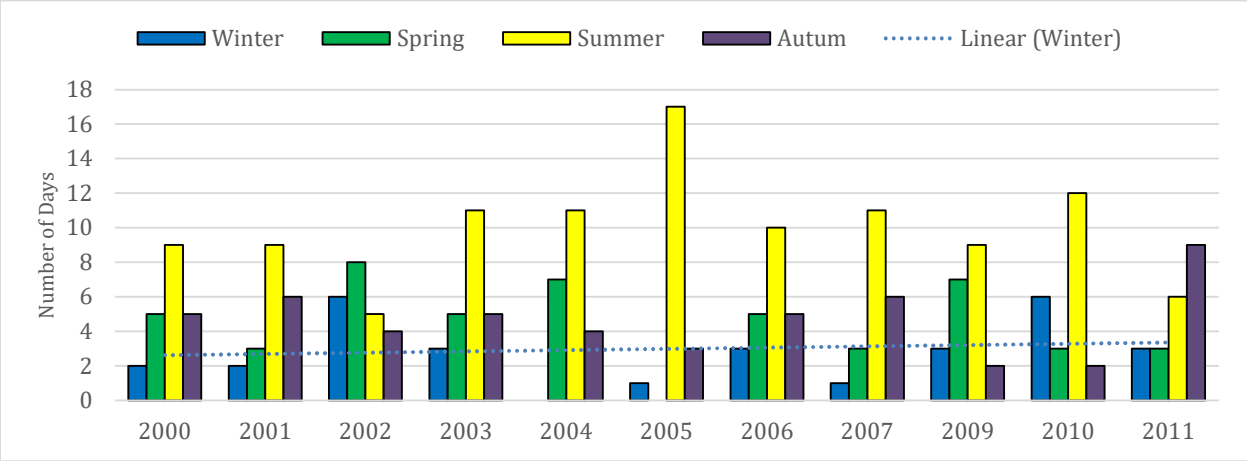


Figure 4: Trends in seasonality of 20% most impaired days at Great Gulf Wilderness

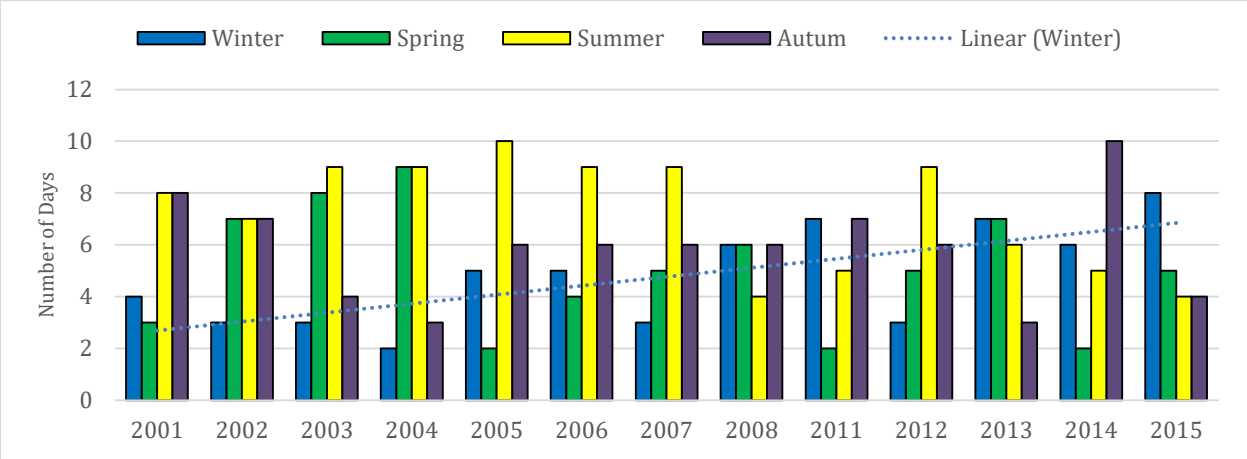
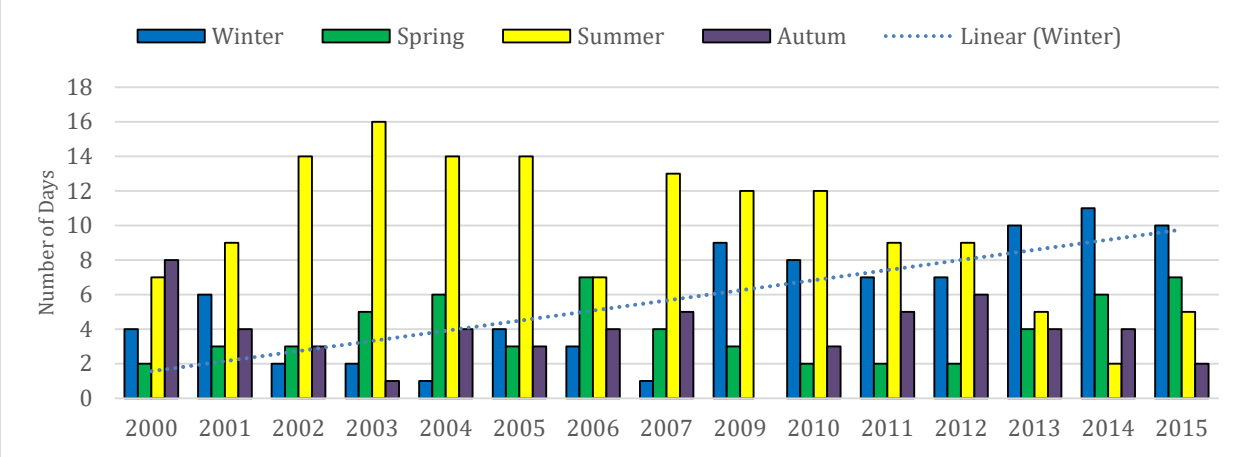


Figure 5: Trends in seasonality of 20% most impaired days at Brigantine Wilderness



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

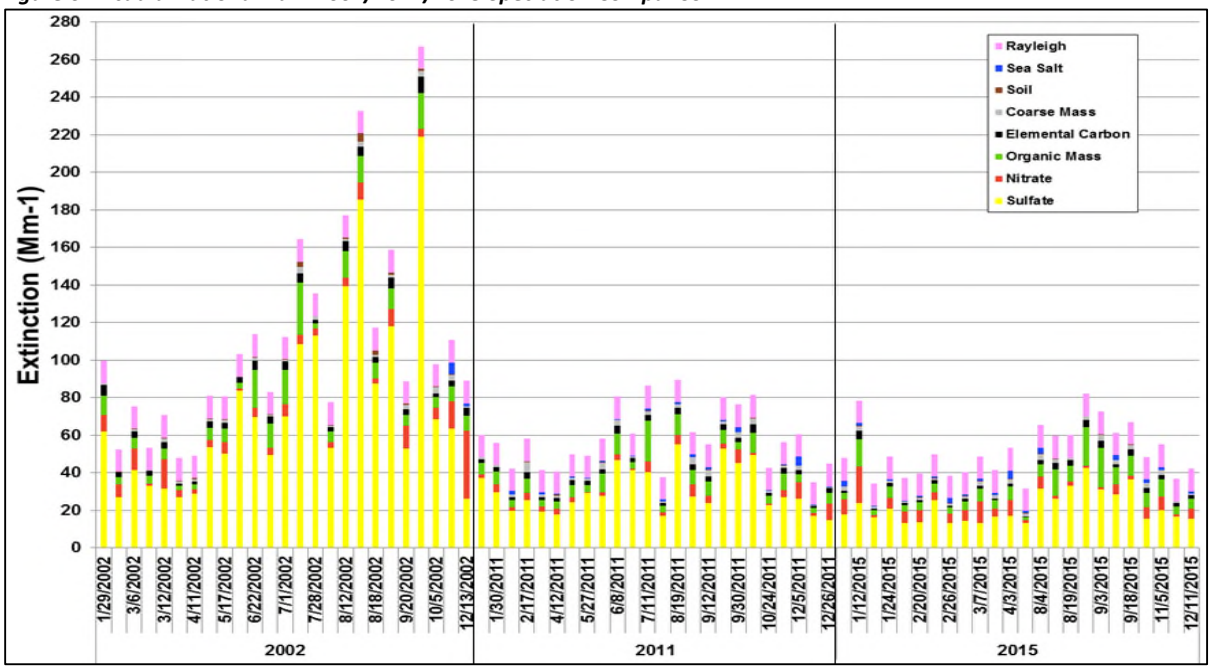


Figure 7: Moosehorn Wilderness 2002/2011/2015 Speciation Comparison

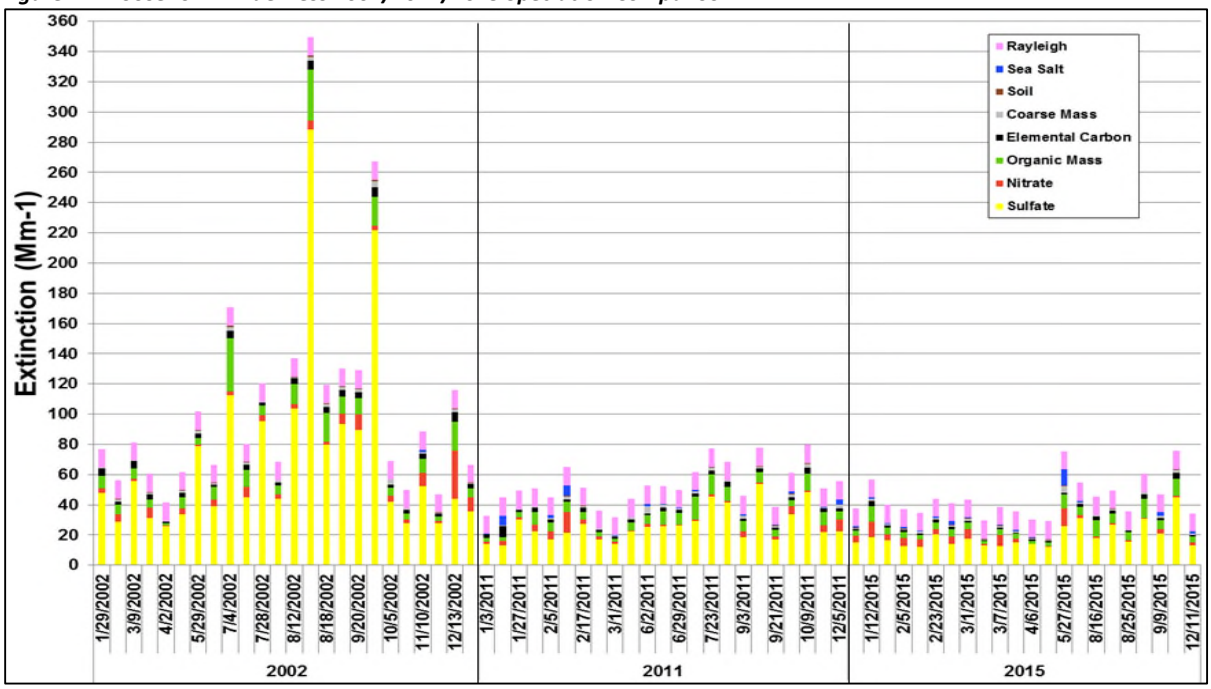


Figure 8: Great Gulf Wilderness 2002/2011/2015 Speciation Comparison

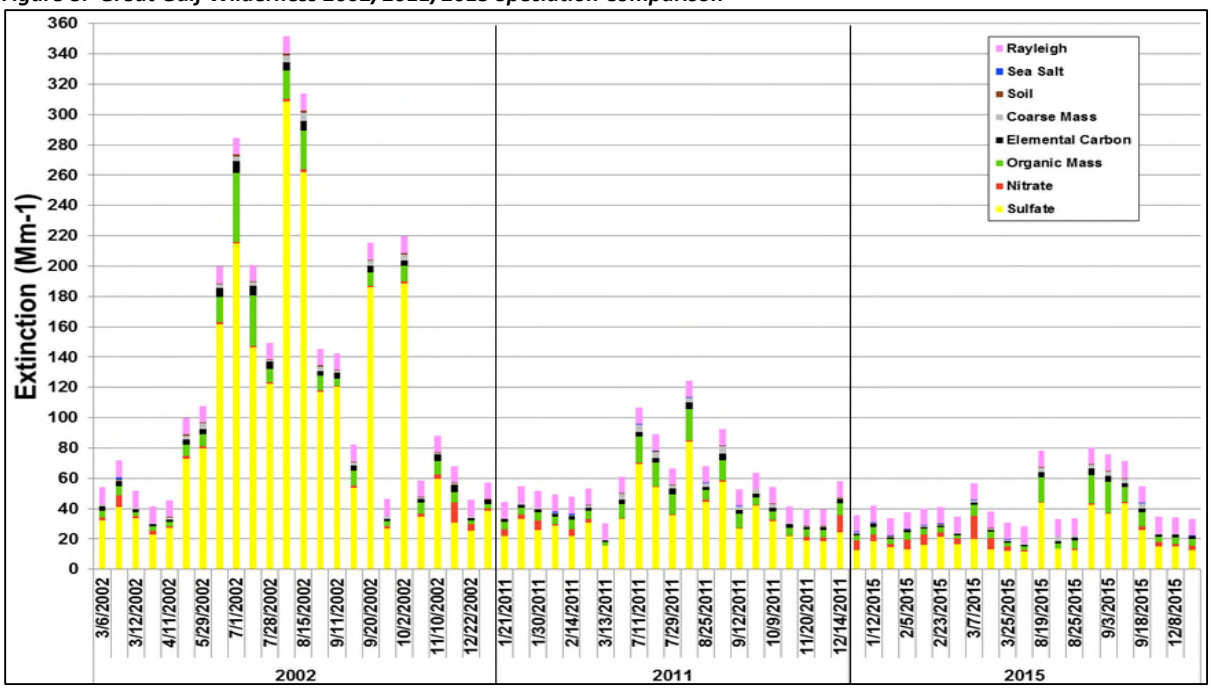


Figure 9: Lye Brook Wilderness 2011/2015 Speciation Comparison

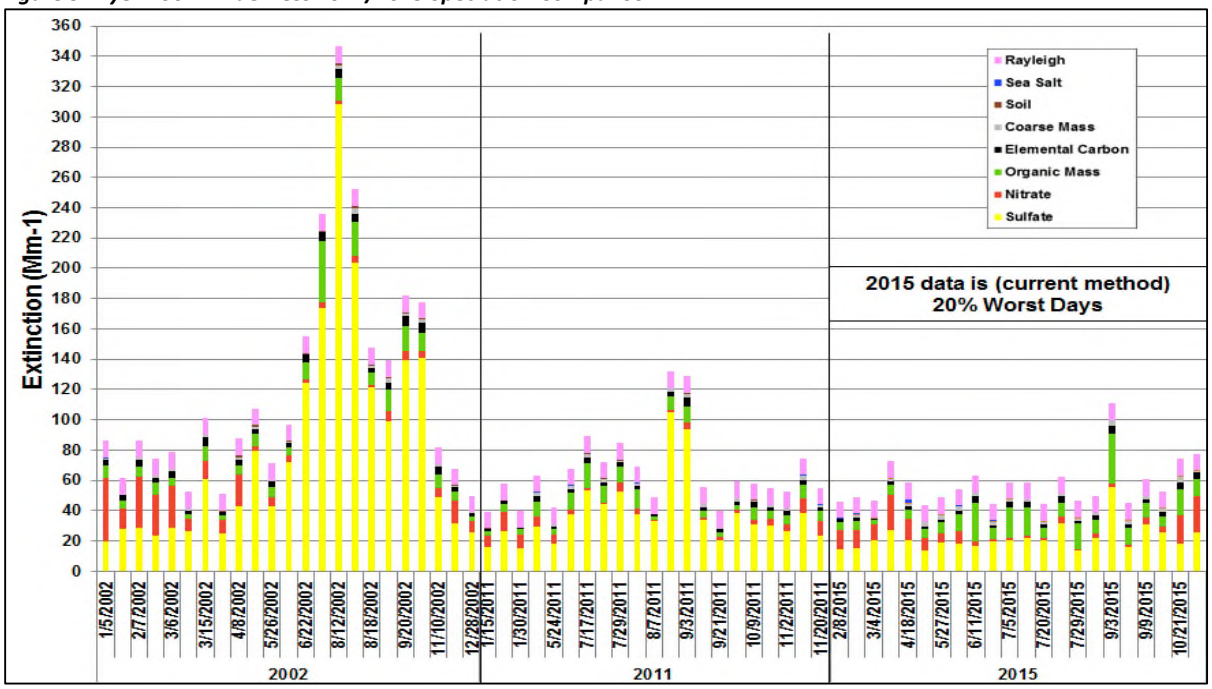


Figure 10: Brigantine Wilderness 2002/2011/2015 Speciation Comparison

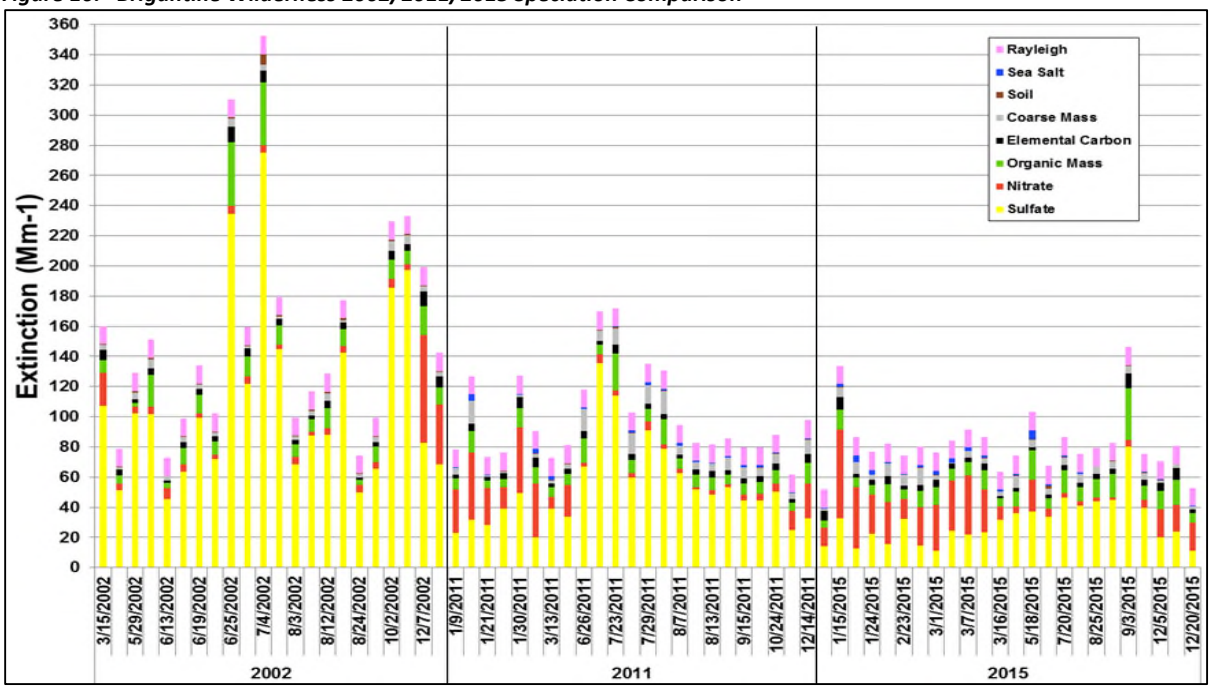


Table 1 demonstrates these trends between 2000 and 2015. At Brigantine, starting in 2007, at least half of the 20% most impaired days in each winter has had more extinction from nitrates than sulfates. In 11 winters out of 15 (73%) in the 2000-2015 period, Brigantine had days in which nitrates contributed 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	NO_3 > SO_4	%	Site	Year	Winter Days	NO_3 > SO_4	%
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

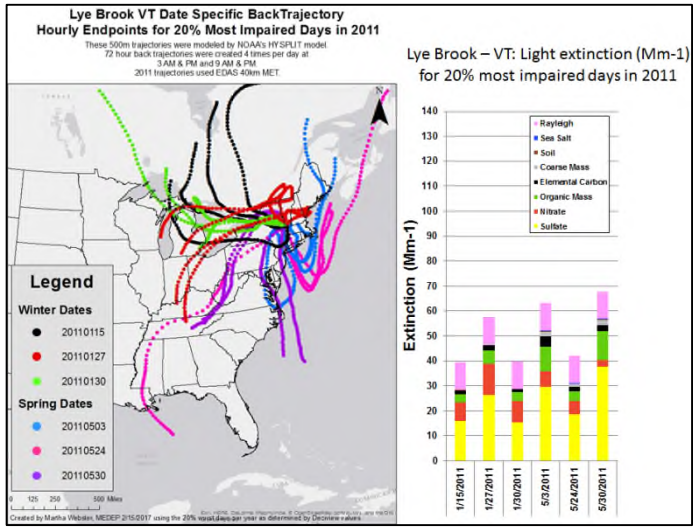


Figure 12: Trajectory analyses of Lye Brook Wilderness 20% most impaired days during Winter 2015

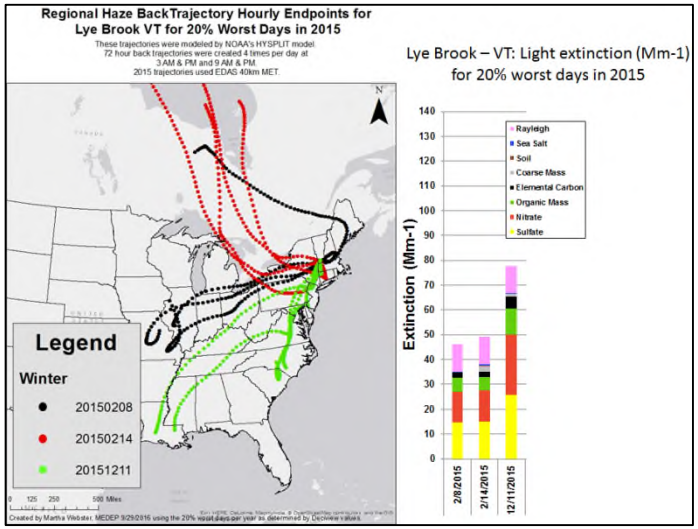


Figure 13: Trajectory analyses of Brigantine 20% most impaired days during Winter 2011

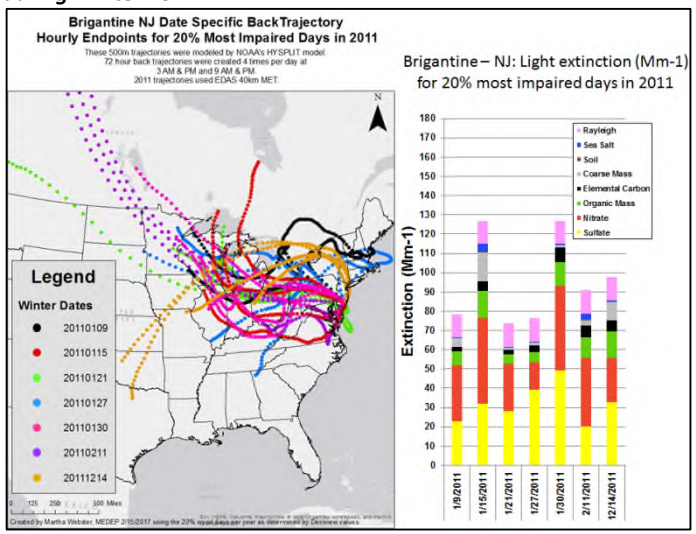


Figure 14: Trajectory analyses of Brigantine 20% most impaired days during Winter 2015

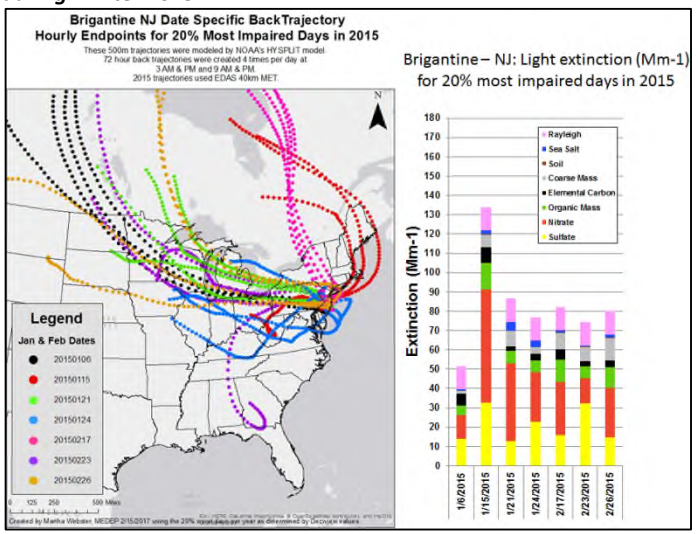
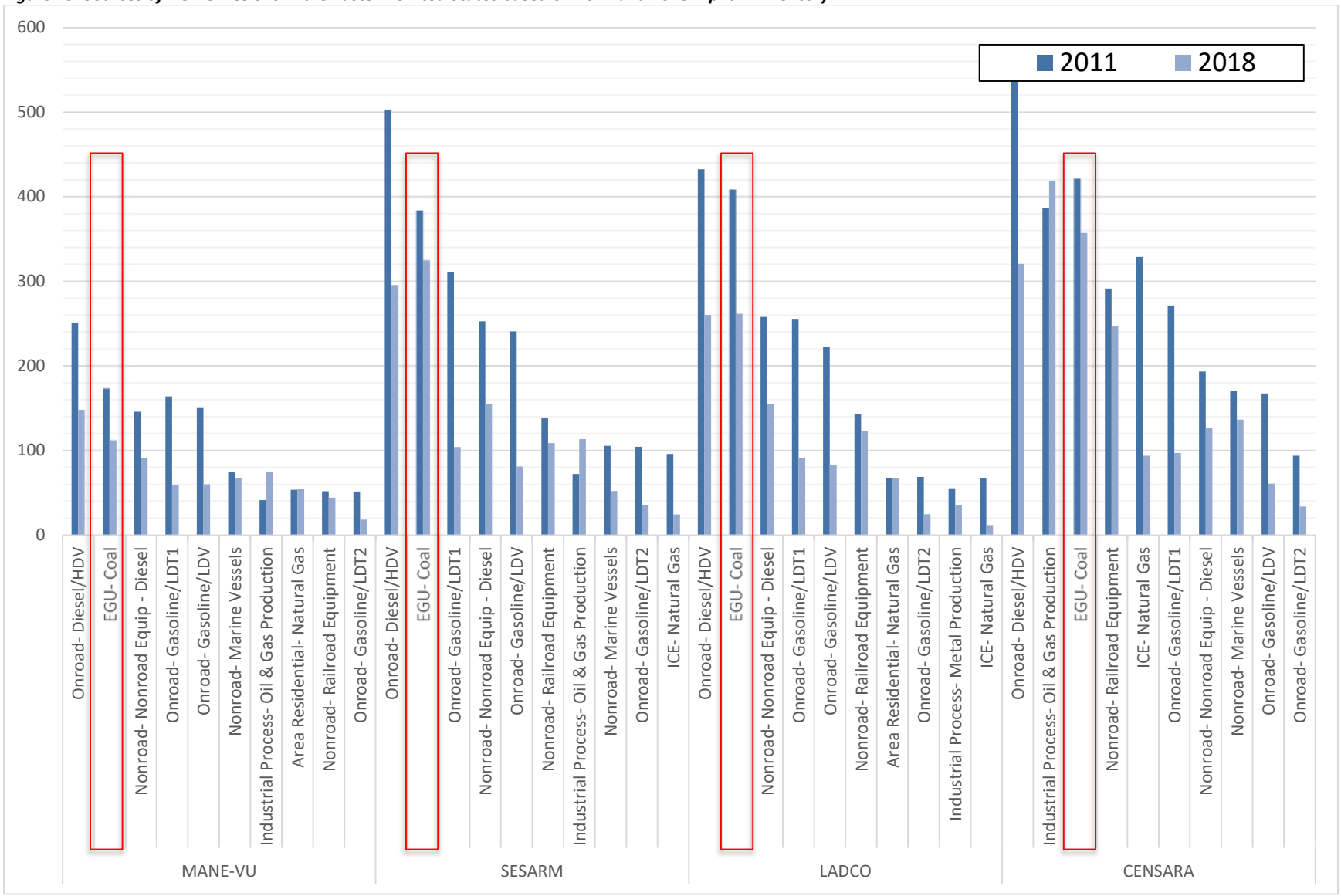


Figure 15: Sources of NOX emissions in the Eastern United States based on 2011 and 2018 Alpha 2 inventory



Sources of Anthropogenic NO_X Emissions

Given that regulation of NO_X 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 NO_X 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 NO_X–emitting source sectors.[2]

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 NO_X emissions from mobile sources. Emissions standards for light duty vehicles were also recently lowered under the Tier 3 regulations[3] 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]

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.[5,6] This implies that NO_x 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 NO_x 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 NO_x 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 NO_X 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 NO_X removed and $3,400 per ton of NO_X removed to restart an idled SNCR.[7,8] EPA found that retrofitting existing coal-fired EGUs with SCR would be $5,000 and SNCR would be $6,400 per ton of NO_X removed.[9]

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[2] Mid-Atlantic Northeast Visibility Union, "Contribution Assessment Preliminary Inventory Analysis."
[3] US EPA, "Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards Final Rule."
[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."
[5] Fisher, "The Effect of Tall Stacks on the Long Range Transport of Air Pollutants."
[6] Trimble, "Air Quality: Information on Tall Smokestacks and Their Contribution to Interstate Transport of Air Pollution."
[7] US EPA, "EGU NOx Mitigation Strategies Final Rule TSD."
[8] Ibid.
[9] Ibid.

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 NO_X controls at the best observed ozone season emission rates found by examining hourly emissions data from CAMD during the period 2005-2012.[10] Due to the fact that the primary factor in reducing the effectiveness of NO_X 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 NO_X trading programs, are not in place in the winter time.

States have developed the ERTAC EGU projection tool[11] 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] ERTAC EGU v2.6 projections have become available now, but have not yet been included in a modeling inventory used for regional haze.[13]

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] Full details of the creation of the control file and the data in the control file are found in Appendix A.

Results

NO_X 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

[10] Vinciguerra et al., "Expected Ozone Benefits of Reducing Nitrogen Oxide (NOx) Emissions from Coal-Fired Electricity Generating Units in the Eastern United States."
[11] AMEC, "Software Technical Documentation for Software to Estimate Future Activity and Air Emissions from Electric Generating Units (EGUs)."
[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.
[13] ERTAC Workgroup, "Documentation of ERTAC EGU CONUS Versions 2.6."
[14] All versions of the inputs were processed using v1.01 of the ERTAC EGU code.

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 NO_X 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 **Error! Reference source not found.**.

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

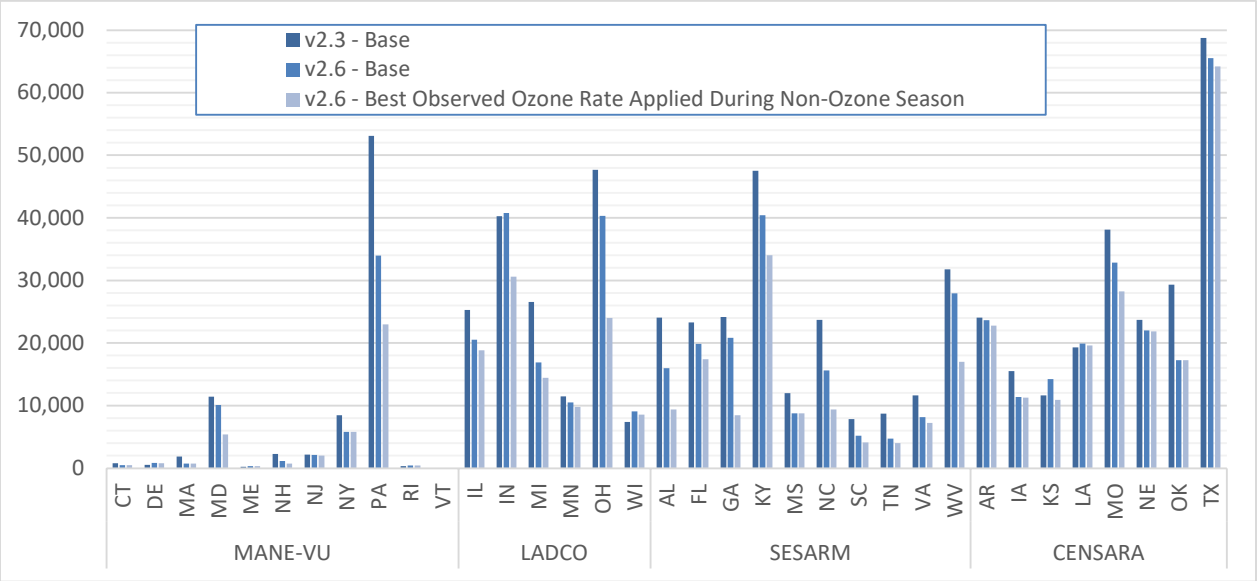


Figure 17 shows the change in non-ozone season emissions that occur when ERTAC inputs are changed from version 2.3 to 2.6. Figure 18 shows the change in non-ozone season emissions that occur when best observed rates are used during the non-ozone season months.

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 NO_X emissions (tons) due to migration from ERTAC v2.3 to v2.6

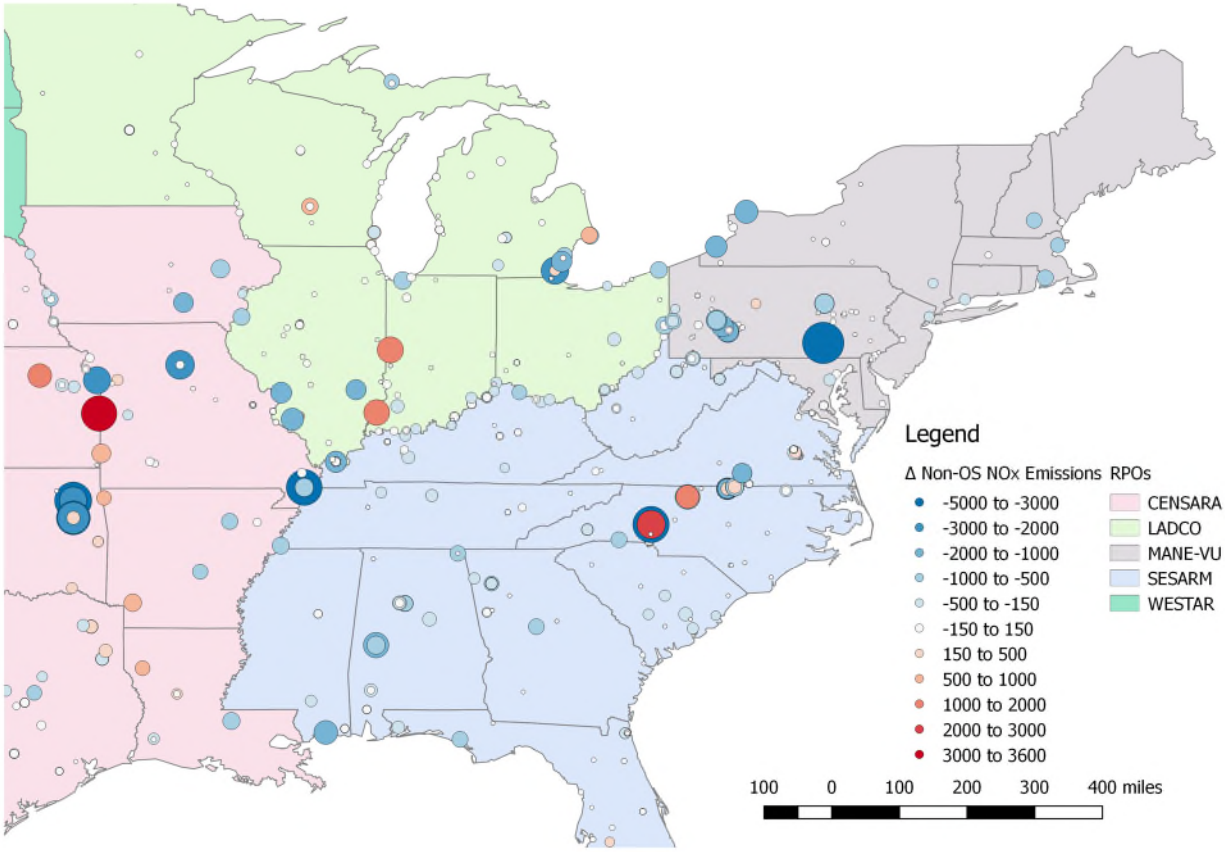
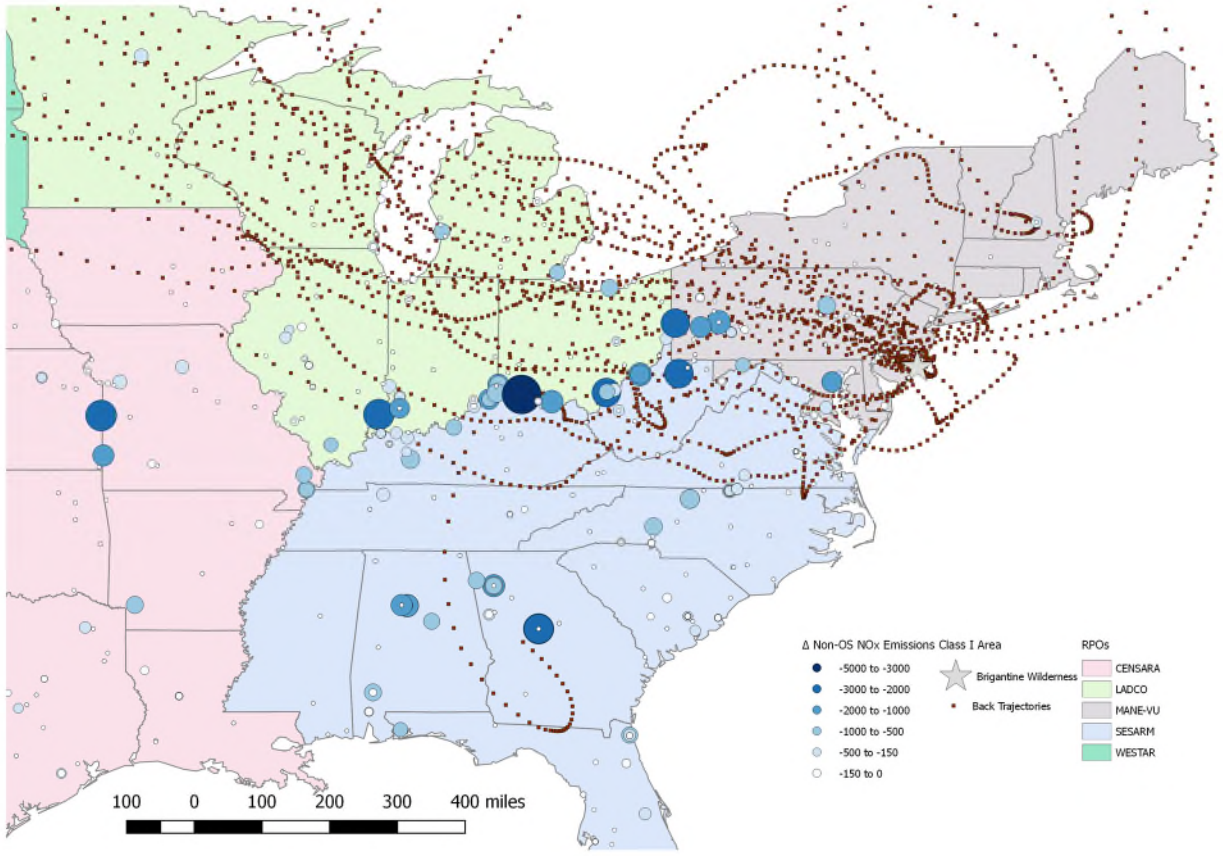


Figure 18: Change in non-OS NO_X emissions (tons) due to optimization of non-OS emission rates and 2011 and 2015 back trajectories on 20% most impaired winter days where nitrates impacted visibility more than sulfates at Brigantine Wilderness



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

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 NO_X emission rate was compared to the non-ozone season NO_X emission rate from the annual summary file. In cases where the best observed ozone season NO_X emission rate at a unit with an installed SCR or SNCR was lower than the non-ozone season NO_X 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 NO_X emissions for units that met the criteria were removed (156 entries) and then new NO_X 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	NO_X	0.0443		2014
1004	CTG2	1/1/2028	12/31/2028	NO_X	0.0522		2014
10043	1001	1/1/2028	12/31/2028	NO_X	0.1009		2015
10075	1	1/1/2028	12/31/2028	NO_X	0.1172		2014
10075	2	1/1/2028	12/31/2028	NO_X	0.1215		2014
1012	2	1/1/2028	12/31/2028	NO_X	0.1482		2015
1012	3	1/1/2028	12/31/2028	NO_X	0.0885		2015
10151	1A	1/1/2028	12/31/2028	NO_X	0.0721		2005
10566	1001	1/1/2028	12/31/2028	NO_X	0.1218		2009
10566	1002	1/1/2028	12/31/2028	NO_X	0.1143		2011
10641	1	1/1/2028	12/31/2028	NO_X	0.0945		2005
10641	2	1/1/2028	12/31/2028	NO_X	0.0949		2006
10678	1	1/1/2028	12/31/2028	NO_X	0.051		2008
1082	4	1/1/2028	12/31/2028	NO_X	0.0537		2010
1241	1	1/1/2028	12/31/2028	NO_X	0.081		2011
1241	2	1/1/2028	12/31/2028	NO_X	0.0908		2015
130	1	1/1/2028	12/31/2028	NO_X	0.0664		2014
130	2	1/1/2028	12/31/2028	NO_X	0.0702		2012
130	3	1/1/2028	12/31/2028	NO_X	0.059		2012
130	4	1/1/2028	12/31/2028	NO_X	0.0591		2012
1356	1	1/1/2028	12/31/2028	NO_X	0.0448		2005
1356	3	1/1/2028	12/31/2028	NO_X	0.0272		2005
1356	4	1/1/2028	12/31/2028	NO_X	0.0272		2005
136	1	1/1/2028	12/31/2028	NO_X	0.0434		2010
136	2	1/1/2028	12/31/2028	NO_X	0.0404		2011
1364	3	1/1/2028	12/31/2028	NO_X	0.045		2005
1364	4	1/1/2028	12/31/2028	NO_X	0.0374		2007
1374	1	1/1/2028	12/31/2028	NO_X	0.1229		2006
1374	2	1/1/2028	12/31/2028	NO_X	0.2179		2005
1378	3	1/1/2028	12/31/2028	NO_X	0.1001		2005
1382	H1	1/1/2028	12/31/2028	NO_X	0.0606		2007
1382	H2	1/1/2028	12/31/2028	NO_X	0.0666		2009
1552	1	1/1/2028	12/31/2028	NO_X	0.2783		2015
1552	2	1/1/2028	12/31/2028	NO_X	0.2351		2015
1554	2	1/1/2028	12/31/2028	NO_X	0.2222		2015
1554	3	1/1/2028	12/31/2028	NO_X	0.0552		2015
1571	1	1/1/2028	12/31/2028	NO_X	0.104		2014
1571	2	1/1/2028	12/31/2028	NO_X	0.1927		2009
1572	1	1/1/2028	12/31/2028	NO_X	0.2197		2015
1572	2	1/1/2028	12/31/2028	NO_X	0.2212		2015
1572	3	1/1/2028	12/31/2028	NO_X	0.2178		2015
1573	1	1/1/2028	12/31/2028	NO_X	0.0251		2013

ORISPL Code	Unit ID	Factor Start Date	Factor End Date	Pollutant	Emission Rate	Control Efficiency	Best Observed Rate Year
1573	2	1/1/2028	12/31/2028	NO_X	0.0309		2011
1702	1	1/1/2028	12/31/2028	NO_X	0.0488		2015
1702	2	1/1/2028	12/31/2028	NO_X	0.0443		2015
1710	2	1/1/2028	12/31/2028	NO_X	0.0366		2015
1710	3	1/1/2028	12/31/2028	NO_X	0.0414		2015
1733	1	1/1/2028	12/31/2028	NO_X	0.038		2014
1733	3	1/1/2028	12/31/2028	NO_X	0.0573		2011
1733	4	1/1/2028	12/31/2028	NO_X	0.0408		2013
1893	1	1/1/2028	12/31/2028	NO_X	0.1708		2014
1893	2	1/1/2028	12/31/2028	NO_X	0.1714		2014
1893	3	1/1/2028	12/31/2028	NO_X	0.05		2010
1893	4	1/1/2028	12/31/2028	NO_X	0.1057		2015
207	1	1/1/2028	12/31/2028	NO_X	0.1265		2010
207	2	1/1/2028	12/31/2028	NO_X	0.1274		2010
2076	1	1/1/2028	12/31/2028	NO_X	0.0918		2009
2079	5A	1/1/2028	12/31/2028	NO_X	0.0718		2012
2094	1	1/1/2028	12/31/2028	NO_X	0.3413		2013
2094	2	1/1/2028	12/31/2028	NO_X	0.4161		2013
2094	3	1/1/2028	12/31/2028	NO_X	0.0787		2010
2167	1	1/1/2028	12/31/2028	NO_X	0.0895		2008
2167	2	1/1/2028	12/31/2028	NO_X	0.0941		2009
2168	MB1	1/1/2028	12/31/2028	NO_X	0.0958		2010
2168	MB2	1/1/2028	12/31/2028	NO_X	0.115		2015
2168	MB3	1/1/2028	12/31/2028	NO_X	0.0961		2010
2364	1	1/1/2028	12/31/2028	NO_X	0.1613		2005
2364	2	1/1/2028	12/31/2028	NO_X	0.159		2006
2367	4	1/1/2028	12/31/2028	NO_X	0.1811		2007
2367	6	1/1/2028	12/31/2028	NO_X	0.1896		2007
2403	2	1/1/2028	12/31/2028	NO_X	0.0745		2011
2408	1	1/1/2028	12/31/2028	NO_X	0.0731		2015
2408	2	1/1/2028	12/31/2028	NO_X	0.0544		2015
26	5	1/1/2028	12/31/2028	NO_X	0.076		2007
2712	1	1/1/2028	12/31/2028	NO_X	0.084		2005
2712	2	1/1/2028	12/31/2028	NO_X	0.0575		2011
2712	3A	1/1/2028	12/31/2028	NO_X	0.0742		2005
2712	3B	1/1/2028	12/31/2028	NO_X	0.0756		2005
2712	4A	1/1/2028	12/31/2028	NO_X	0.0793		2009
2712	4B	1/1/2028	12/31/2028	NO_X	0.0793		2009
2718	4	1/1/2028	12/31/2028	NO_X	0.1778		2008
2718	5	1/1/2028	12/31/2028	NO_X	0.1912		2012
2721	5	1/1/2028	12/31/2028	NO_X	0.056		2011
2721	6	1/1/2028	12/31/2028	NO_X	0.0457		2013
2727	1	1/1/2028	12/31/2028	NO_X	0.196		2010
2727	2	1/1/2028	12/31/2028	NO_X	0.1956		2010
2727	3	1/1/2028	12/31/2028	NO_X	0.0679		2009
2727	4	1/1/2028	12/31/2028	NO_X	0.2008		2008
2828	1	1/1/2028	12/31/2028	NO_X	0.0348		2009
2828	2	1/1/2028	12/31/2028	NO_X	0.0426		2009
2828	3	1/1/2028	12/31/2028	NO_X	0.0226		2007
2832	7	1/1/2028	12/31/2028	NO_X	0.0536		2007
2832	8	1/1/2028	12/31/2028	NO_X	0.054		2007
2836	12	1/1/2028	12/31/2028	NO_X	0.2842		2013
2840	4	1/1/2028	12/31/2028	NO_X	0.0546		2010
2850	1	1/1/2028	12/31/2028	NO_X	0.0939		2009
2850	3	1/1/2028	12/31/2028	NO_X	0.0961		2006
2850	4	1/1/2028	12/31/2028	NO_X	0.1078		2015
2866	5	1/1/2028	12/31/2028	NO_X	0.1058		2012
2866	7	1/1/2028	12/31/2028	NO_X	0.1019		2014
2876	1	1/1/2028	12/31/2028	NO_X	0.0788		2005
2876	2	1/1/2028	12/31/2028	NO_X	0.0792		2005
2876	3	1/1/2028	12/31/2028	NO_X	0.0787		2005
2876	4	1/1/2028	12/31/2028	NO_X	0.0786		2005
2876	5	1/1/2028	12/31/2028	NO_X	0.0785		2005
3	4	1/1/2028	12/31/2028	NO_X	0.2262		2008
3	5	1/1/2028	12/31/2028	NO_X	0.0603		2010
3122	1	1/1/2028	12/31/2028	NO_X	0.0667		2006
3122	2	1/1/2028	12/31/2028	NO_X	0.0826		2006
3122	3	1/1/2028	12/31/2028	NO_X	0.0872		2005

ORISPL Code	Unit ID	Factor Start Date	Factor End Date	Pollutant	Emission Rate	Control Efficiency	Best Observed Rate Year
3130	1	1/1/2028	12/31/2028	NO_X	0.0747		2014
3130	2	1/1/2028	12/31/2028	NO_X	0.0745		2012
3136	1	1/1/2028	12/31/2028	NO_X	0.0431		2006
3136	2	1/1/2028	12/31/2028	NO_X	0.0433		2008
3149	1	1/1/2028	12/31/2028	NO_X	0.0581		2006
3149	2	1/1/2028	12/31/2028	NO_X	0.0578		2006
3297	WAT1	1/1/2028	12/31/2028	NO_X	0.0601		2007
3297	WAT2	1/1/2028	12/31/2028	NO_X	0.0541		2006
3298	WIL1	1/1/2028	12/31/2028	NO_X	0.0601		2005
3396	1	1/1/2028	12/31/2028	NO_X	0.0618		2009
3399	1	1/1/2028	12/31/2028	NO_X	0.0588		2009
3399	2	1/1/2028	12/31/2028	NO_X	0.0609		2014
3407	1	1/1/2028	12/31/2028	NO_X	0.0498		2009
3407	2	1/1/2028	12/31/2028	NO_X	0.0501		2007
3407	3	1/1/2028	12/31/2028	NO_X	0.0504		2007
3407	4	1/1/2028	12/31/2028	NO_X	0.0501		2007
3407	5	1/1/2028	12/31/2028	NO_X	0.0486		2007
3407	6	1/1/2028	12/31/2028	NO_X	0.0448		2006
3407	7	1/1/2028	12/31/2028	NO_X	0.0447		2006
3407	8	1/1/2028	12/31/2028	NO_X	0.0448		2006
3407	9	1/1/2028	12/31/2028	NO_X	0.0449		2006
3470	WAP5	1/1/2028	12/31/2028	NO_X	0.0383		2007
3470	WAP6	1/1/2028	12/31/2028	NO_X	0.0394		2007
3470	WAP7	1/1/2028	12/31/2028	NO_X	0.036		2007
3470	WAP8	1/1/2028	12/31/2028	NO_X	0.0363		2006
3497	1	1/1/2028	12/31/2028	NO_X	0.1261		2015
3497	2	1/1/2028	12/31/2028	NO_X	0.1305		2013
3797	4	1/1/2028	12/31/2028	NO_X	0.0487		2014
3797	5	1/1/2028	12/31/2028	NO_X	0.0309		2008
3797	6	1/1/2028	12/31/2028	NO_X	0.0326		2006
3935	1	1/1/2028	12/31/2028	NO_X	0.0317		2006
3935	2	1/1/2028	12/31/2028	NO_X	0.0312		2006
3944	1	1/1/2028	12/31/2028	NO_X	0.0634		2005
3944	2	1/1/2028	12/31/2028	NO_X	0.0662		2005
3944	3	1/1/2028	12/31/2028	NO_X	0.0658		2005
3954	1	1/1/2028	12/31/2028	NO_X	0.0539		2006
3954	2	1/1/2028	12/31/2028	NO_X	0.0485		2006
3954	3	1/1/2028	12/31/2028	NO_X	0.0768		2006
4041	6	1/1/2028	12/31/2028	NO_X	0.0681		2013
4041	7	1/1/2028	12/31/2028	NO_X	0.0603		2015
4041	8	1/1/2028	12/31/2028	NO_X	0.0608		2015
4050	5	1/1/2028	12/31/2028	NO_X	0.0361		2014
4078	4	1/1/2028	12/31/2028	NO_X	0.053		2014
4125	9	1/1/2028	12/31/2028	NO_X	0.0368		2015
50776	1	1/1/2028	12/31/2028	NO_X	0.1051		2005
50776	2	1/1/2028	12/31/2028	NO_X	0.1056		2015
50974	1	1/1/2028	12/31/2028	NO_X	0.0573		2005
50974	2	1/1/2028	12/31/2028	NO_X	0.0793		2005
51	1	1/1/2028	12/31/2028	NO_X	0.1917		2014
52071	5A	1/1/2028	12/31/2028	NO_X	0.0618		2011
52071	5B	1/1/2028	12/31/2028	NO_X	0.0626		2011
54081	BLR01A	1/1/2028	12/31/2028	NO_X	0.2608		2005
54081	BLR01B	1/1/2028	12/31/2028	NO_X	0.26		2005
54081	BLR02A	1/1/2028	12/31/2028	NO_X	0.2548		2005
54081	BLR02B	1/1/2028	12/31/2028	NO_X	0.2547		2005
54081	BLR03A	1/1/2028	12/31/2028	NO_X	0.2614		2005
54081	BLR03B	1/1/2028	12/31/2028	NO_X	0.2616		2005
54081	BLR04A	1/1/2028	12/31/2028	NO_X	0.2648		2005
54081	BLR04B	1/1/2028	12/31/2028	NO_X	0.2647		2005
54304	1	1/1/2028	12/31/2028	NO_X	0.0879		2008
54755	2	1/1/2028	12/31/2028	NO_X	0.1316		2015
56	2	1/1/2028	12/31/2028	NO_X	0.164		2011
56	3	1/1/2028	12/31/2028	NO_X	0.0585		2011
56068	1	1/1/2028	12/31/2028	NO_X	0.049		2010
564	2	1/1/2028	12/31/2028	NO_X	0.1042		2015
56456	1	1/1/2028	12/31/2028	NO_X	0.0641		2012
56564	SN-01	1/1/2028	12/31/2028	NO_X	0.04		2014
56611	S01	1/1/2028	12/31/2028	NO_X	0.0397		2015

ORISPL Code	Unit ID	Factor Start Date	Factor End Date	Pollutant	Emission Rate	Control Efficiency	Best Observed Rate Year
56671	1	1/1/2028	12/31/2028	NO_X	0.0648		2013
594	4	1/1/2028	12/31/2028	NO_X	0.0657		2012
60	2	1/1/2028	12/31/2028	NO_X	0.0619		2012
6002	1	1/1/2028	12/31/2028	NO_X	0.0656		2011
6002	2	1/1/2028	12/31/2028	NO_X	0.0538		2011
6002	3	1/1/2028	12/31/2028	NO_X	0.0634		2006
6002	4	1/1/2028	12/31/2028	NO_X	0.063		2008
6004	1	1/1/2028	12/31/2028	NO_X	0.0394		2005
6004	2	1/1/2028	12/31/2028	NO_X	0.039		2005
6016	1	1/1/2028	12/31/2028	NO_X	0.0736		2009
6018	2	1/1/2028	12/31/2028	NO_X	0.0518		2006
6019	1	1/1/2028	12/31/2028	NO_X	0.0562		2006
602	1	1/1/2028	12/31/2028	NO_X	0.0589		2007
602	2	1/1/2028	12/31/2028	NO_X	0.0733		2015
6031	2	1/1/2028	12/31/2028	NO_X	0.0885		2005
6041	1	1/1/2028	12/31/2028	NO_X	0.0829		2008
6041	2	1/1/2028	12/31/2028	NO_X	0.0729		2006
6041	3	1/1/2028	12/31/2028	NO_X	0.0577		2015
6041	4	1/1/2028	12/31/2028	NO_X	0.0604		2012
6052	1	1/1/2028	12/31/2028	NO_X	0.0475		2010
6052	2	1/1/2028	12/31/2028	NO_X	0.0507		2006
6065	1	1/1/2028	12/31/2028	NO_X	0.0613		2015
6068	2	1/1/2028	12/31/2028	NO_X	0.0988		2015
6068	3	1/1/2028	12/31/2028	NO_X	0.1152		2015
6071	1	1/1/2028	12/31/2028	NO_X	0.0309		2005
6071	2	1/1/2028	12/31/2028	NO_X	0.0407		2015
6085	14	1/1/2028	12/31/2028	NO_X	0.0979		2013
6094	1	1/1/2028	12/31/2028	NO_X	0.082		2008
6094	2	1/1/2028	12/31/2028	NO_X	0.0801		2007
6094	3	1/1/2028	12/31/2028	NO_X	0.0744		2005
6096	2	1/1/2028	12/31/2028	NO_X	0.0582		2015
6113	1	1/1/2028	12/31/2028	NO_X	0.0343		2007
6113	2	1/1/2028	12/31/2028	NO_X	0.0672		2006
6113	3	1/1/2028	12/31/2028	NO_X	0.0659		2005
6113	4	1/1/2028	12/31/2028	NO_X	0.0632		2008
6113	5	1/1/2028	12/31/2028	NO_X	0.0597		2007
6137	1	1/1/2028	12/31/2028	NO_X	0.0756		2006
6137	2	1/1/2028	12/31/2028	NO_X	0.1009		2006
6147	2	1/1/2028	12/31/2028	NO_X	0.1187		2014
6147	3	1/1/2028	12/31/2028	NO_X	0.1485		2014
6170	1	1/1/2028	12/31/2028	NO_X	0.0498		2007
6170	2	1/1/2028	12/31/2028	NO_X	0.0601		2007
6190	2	1/1/2028	12/31/2028	NO_X	0.1358		2015
6190	1-Mar	1/1/2028	12/31/2028	NO_X	0.0289		2011
6190	2-Mar	1/1/2028	12/31/2028	NO_X	0.0419		2014
6195	1	1/1/2028	12/31/2028	NO_X	0.0829		2013
6195	2	1/1/2028	12/31/2028	NO_X	0.0596		2014
6213	1SG1	1/1/2028	12/31/2028	NO_X	0.062		2014
6213	2SG1	1/1/2028	12/31/2028	NO_X	0.0587		2015
6249	1	1/1/2028	12/31/2028	NO_X	0.0623		2005
6249	2	1/1/2028	12/31/2028	NO_X	0.0679		2005
6249	3	1/1/2028	12/31/2028	NO_X	0.0812		2015
6249	4	1/1/2028	12/31/2028	NO_X	0.0869		2012
6250	1A	1/1/2028	12/31/2028	NO_X	0.061		2007
6250	1B	1/1/2028	12/31/2028	NO_X	0.0614		2007
6257	1	1/1/2028	12/31/2028	NO_X	0.0613		2014
6257	2	1/1/2028	12/31/2028	NO_X	0.0606		2014
6257	3	1/1/2028	12/31/2028	NO_X	0.0593		2012
6257	4	1/1/2028	12/31/2028	NO_X	0.0627		2013
6264	1	1/1/2028	12/31/2028	NO_X	0.0387		2007
628	4	1/1/2028	12/31/2028	NO_X	0.0504		2014
628	5	1/1/2028	12/31/2028	NO_X	0.0446		2010
641	5	1/1/2028	12/31/2028	NO_X	0.1193		2015
641	7	1/1/2028	12/31/2028	NO_X	0.0842		2008
645	BB01	1/1/2028	12/31/2028	NO_X	0.0823		2011
645	BB02	1/1/2028	12/31/2028	NO_X	0.0809		2010
645	BB03	1/1/2028	12/31/2028	NO_X	0.0908		2015
645	BB04	1/1/2028	12/31/2028	NO_X	0.0748		2010

ORISPL Code	Unit ID	Factor Start Date	Factor End Date	Pollutant	Emission Rate	Control Efficiency	Best Observed Rate Year
663	B2	1/1/2028	12/31/2028	NO_X	0.0571		2012
667	1A	1/1/2028	12/31/2028	NO_X	0.0252		2013
667	2A	1/1/2028	12/31/2028	NO_X	0.042		2012
6705	4	1/1/2028	12/31/2028	NO_X	0.0948		2007
6768	1	1/1/2028	12/31/2028	NO_X	0.1046		2013
6823	W1	1/1/2028	12/31/2028	NO_X	0.0477		2006
703	1BLR	1/1/2028	12/31/2028	NO_X	0.0547		2008
703	2BLR	1/1/2028	12/31/2028	NO_X	0.0543		2006
703	3BLR	1/1/2028	12/31/2028	NO_X	0.0553		2006
703	4BLR	1/1/2028	12/31/2028	NO_X	0.0525		2013
7030	U1	1/1/2028	12/31/2028	NO_X	0.097		2015
7030	U2	1/1/2028	12/31/2028	NO_X	0.0979		2015
708	4	1/1/2028	12/31/2028	NO_X	0.0553		2007
7097	**2	1/1/2028	12/31/2028	NO_X	0.0392		2011
7210	COP1	1/1/2028	12/31/2028	NO_X	0.0799		2009
7213	1	1/1/2028	12/31/2028	NO_X	0.2327		2005
7213	2	1/1/2028	12/31/2028	NO_X	0.2428		2007
7343	4	1/1/2028	12/31/2028	NO_X	0.1873		2015
8	10	1/1/2028	12/31/2028	NO_X	0.068		2006
8042	1	1/1/2028	12/31/2028	NO_X	0.028		2007
8042	2	1/1/2028	12/31/2028	NO_X	0.0382		2009
8102	1	1/1/2028	12/31/2028	NO_X	0.0686		2007
8102	2	1/1/2028	12/31/2028	NO_X	0.0553		2005
8226	1	1/1/2028	12/31/2028	NO_X	0.0901		2006
861	1	1/1/2028	12/31/2028	NO_X	0.0495		2011
861	2	1/1/2028	12/31/2028	NO_X	0.0524		2008
876	1	1/1/2028	12/31/2028	NO_X	0.0577		2013
876	2	1/1/2028	12/31/2028	NO_X	0.06		2009
879	51	1/1/2028	12/31/2028	NO_X	0.0985		2013
879	52	1/1/2028	12/31/2028	NO_X	0.0987		2015
879	61	1/1/2028	12/31/2028	NO_X	0.0973		2013
879	62	1/1/2028	12/31/2028	NO_X	0.0885		2015
889	2	1/1/2028	12/31/2028	NO_X	0.0509		2010
891	9	1/1/2028	12/31/2028	NO_X	0.029		2008
963	31	1/1/2028	12/31/2028	NO_X	0.0938		2007
963	32	1/1/2028	12/31/2028	NO_X	0.0846		2008
963	33	1/1/2028	12/31/2028	NO_X	0.0603		2014
976	123	1/1/2028	12/31/2028	NO_X	0.0656		2006
976	4	1/1/2028	12/31/2028	NO_X	0.0785		2015
983	1	1/1/2028	12/31/2028	NO_X	0.0735		2005
983	2	1/1/2028	12/31/2028	NO_X	0.075		2005
983	3	1/1/2028	12/31/2028	NO_X	0.0742		2005
994	2	1/1/2028	12/31/2028	NO_X	0.051		2005
994	3	1/1/2028	12/31/2028	NO_X	0.0466		2005
997	12	1/1/2028	12/31/2028	NO_X	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

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	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

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	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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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

RPO	St.	Facility Name	Orispl	Unit ID	v2.3 Base	v2.6 Base	v2.6 BOR	v2.6-v2.3	BOR-v2.6
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