

State Registration
Number
B2810

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B2810-2012c

**DTE Electric Company -
River Rouge Power Plant**

SRN: B2810

Located at

1 Belanger Park Drive, River Rouge, Michigan 48218

Permit Number: MI-ROP-B2810-2012c

Staff Report Date: July 19, 2010

Amended Dates: October 16, 2015;
September 13, 2016
July 1, 2021

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

TABLE OF CONTENTS

JULY 19, 2010 STAFF REPORT	3
JANUARY 25, 2012 STAFF REPORT ADDENDUM	10
OCTOBER 16, 2015 STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION	44
DECEMBER 1, 2015 STAFF REPORT ADDENDUM FOR RULE 216(2) MINOR MODIFICATION	46
SEPTEMBER 13, 2016 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION	47
NOVEMBER 1, 2016 - STAFF REPORT ADDENDUM FOR RULE 216(2) MINOR MODIFICATION	49
JULY 1, 2021 STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION	50

Michigan Department of Environmental Quality
Air Quality Division

RENEWABLE OPERATING PERMIT

State Registration
Number

ROP Number

B2810

JULY 19, 2010 STAFF REPORT

MI-ROP-B2810-2012

Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	Detroit Edison Company River Rouge Power Plant 1 Belanger Park Drive River Rouge, Michigan 48218
Source Registration Number (SRN):	B2810
North American Industry Classification System (NAICS) Code:	221112
Number of Stationary Source Sections:	2
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	200800032
Responsible Official:	Mr. Brian Rice, Plant Manager 313-297-8218 (Section 1) Mr. Tom Tanciar, Plant Manager – Peakers 313-897-1065 (Section 2)
AQD Contact:	Jeff Korniski 313-456-4681
Date Permit Application Submitted:	March 21, 2008
Date Application Was Administratively Complete:	March 21, 2008
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	July 19, 2010
Deadline for Public Comment:	August 18, 2010

Source Description

The Detroit Edison River Rouge Power Plant is located in the City of River Rouge and bounded by the Detroit River to the east, the Rouge River Canal to the north, a railway to the west, and Belanger Park Drive to the south. The nearest residential property is located across Marion Avenue, approximately 500 yards west of the plant. The River Rouge Power Plant is an Electrical Utility Power Generation Facility generating power from the burning of coal, natural gas, blast furnace gas, and coke oven gas. The plant also receives and pulverizes coal for delivery to the U.S. Steel and SeverStal North America integrated steel mills.

The facility has numerous baghouses for the control of particulate generated from coal handling equipment and two electrostatic precipitators for the control of particulate generated from coal combustion. Low-NO_x burner technology is utilized for the minimization of nitrogen oxides generated during fuel combustion.

The Renewable Operating Permit is divided into two sections. The boilers and coal handling equipment are located in Section 1. The diesel powered peaking units, under different management, are located in Section 2.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2008** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	454
Lead (Pb)	0.031
Nitrogen Oxides (NO _x)	5438
Particulate Matter less than 10 microns (PM ₁₀)	39
Sulfur Oxides (SO _x)	14493
Volatile Organic Compounds (VOCs)	53

See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Wayne County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as a nonattainment area with respect to the particulate matter (PM_{2.5}) standard. Wayne County is currently designated as attainment/unclassified for all other criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because the potential to emit nitrogen oxides, sulfur dioxide, and carbon monoxide each exceed 100 tons per year.

EU-BOILER#1 at the stationary source was subject to review under the Prevention of Significant Deterioration regulations of Title 40 of the Code of Federal Regulations (CFR), Part 52.21 because at the

time of New Source Review permitting the potential to emit carbon monoxide, sulfur dioxide, and nitrogen oxides were each greater than 100 tons per year.

EU-FLYASH_SILO#1, EU-FLYASH_SILO#2, EU-PEAKER_DG11-1, EU-PEAKER_DG11-2, EU-PEAKER_DG11-3, and EU-PEAKER_DG11-4 were installed prior to August 15, 1967. As a result, this equipment is considered "grandfathered" and is not subject to New Source Review (NSR) permitting requirements. However, future modifications of this equipment may be subject to NSR.

EU-BOILER#1 at the stationary source is subject to the New Source Performance Standards for Electric Steam Generating Units for which Construction is Commenced after September 18, 1978 promulgated in Title 40 of the Code of Federal Regulations, Part 60, Subparts A and Da.

EU-AUX_BOILER at the stationary source is subject to the New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units promulgated in Title 40 of the Code of Federal Regulations, Part 60, Subparts A and Db. At 40 CFR 60.44b(k), an affected facility meeting the criteria at 40 CFR 60.44(j)(1) through (3), as included in Conditions II.1 and III.3 of EU-AUX_BOILER, are not subject to the NO_x limitations within 40 CFR 60.44b.

Each of the emission units within FG-PCI_COAL_HAND is subject to the New Source Performance Standards for Coal Preparation and Processing Plants promulgated in Title 40 of the Code of Federal Regulations, Part 60, Subparts A and Y.

EU-AUX_BOILER and EU-PCI_COALMILLS at the stationary source were potentially subject to the Maximum Achievable Control Technology Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in Title 40 of the Code of Federal Regulations (CFR), Part 63, Subparts A and DDDDD. On July 30, 2007, the United States Court of Appeals for the District of Columbia Circuit issued the mandate to vacate 40 CFR 63, Subpart DDDDD. The result of this vacatur is that the standard is no longer in effect.

EU-BOILER#1, EU-BOILER#2, and EU-BOILER#3 at the stationary source are subject to the federal Acid Rain program promulgated in Title 40 of the Code of Federal Regulations (CFR), Part 72.

EU-BOILER#1, EU-BOILER#2, and EU-BOILER#3 at the stationary source are subject to the Clean Air Interstate Rule NO_x annual trading program pursuant to Rules 802a, 803, 821, and 830 through 834, are subject to the Clean Air Interstate Rule NO_x ozone season trading program pursuant to Rules 802a, 803 and 821 through 826, and are subject to the Clean Air Interstate Rule SO₂ annual trading program pursuant to Rule 420.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the DNRE "Procedure for Evaluating Periodic Monitoring Submittals."

EU-BOILER#2 and EU-BOILER#3 at the stationary source are subject to the federal Compliance Assurance Monitoring (CAM) rule under Title 40 of the Code of Federal Regulations (CFR), Part 64. EU-BOILER#2 and EU-BOILER#3 each have a control device and potential pre-control emissions of particulate matter greater than the major source threshold level.

The emission limitations for nitrogen oxides from EU-BOILER#1 at the stationary source are exempt from the federal Compliance Assurance Monitoring (CAM) regulation under Title 40 of the Code of Federal Regulations (CFR), Part 64, because the nitrogen oxides continuous emission monitoring system required by the Part 70 permit (ROP) pursuant to 40 CFR 52.21 meets the CAM exemption for a continuous compliance determination method. Therefore, EU-BOILER#1 is exempt from CAM requirements for nitrogen oxides.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document. PTIs issued after the effective date of ROP No. 199600209 are identified in Appendix 6 of the ROP.

The following table lists all individual PTIs that were incorporated into previous ROPs.

PTI Number	
C-5603	436-95A, 437-95A, 438-95A
C-7487	629-86
C-10991, C-10992, C-10993	269-99
C-11128, C-11129	392-99
	258-00

Equivalent Requirements

This permit does not include any equivalent requirements pursuant to Rule 212(5). Equivalent requirements are enforceable applicable requirements that are equivalent to the applicable requirements contained in the original PTI, a Consent Order/Judgment, and/or the State Implementation Plan.

Non-applicable Requirements

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt Emission Unit ID	Description of Exempt Emission Unit	ROP Exemption	PTI Permit Exemption
EU-GAS_UST	2000 gallon gasoline underground storage tank for the refueling of on-site vehicles (i.e. dispensing facility)	R 336.1212(4)(c)	R 336.1284(g)(i)
EU-AUXBR_AIRHTR	3.287 MMBtu/hr maximum capacity natural gas-fired make-up air heater for the auxiliary boiler	R 336.1212(4)(b)	R 336.1282(b)(i)
EU-WARHSEA_HTRS	0.175 MMBtu/hr maximum capacity natural gas-fired heaters (7) in Warehouse A	R 336.1212(4)(b)	R 336.1282(b)(i)
EU-ZEP_TANK	65 gallon storage tank for Zep Dyna 143 parts cleaner in Fuel Supply Tractor house	R 336.1212(4)(c)	R 336.1284(i)

Draft ROP Terms/Conditions Not Agreed to by Applicant

The following table and subsequent discussion lists terms and/or conditions of the draft ROP that the AQD and the applicant did not agree upon and outlines the applicant’s objections pursuant to Rule 214(2). The terms and conditions that the AQD believes are necessary to comply with the requirements of Rule 213 shall be incorporated into the ROP.

Emission Unit/ Flexible Group ID	Permit Term(s) and/or Condition(s) in Dispute
FG-BOILERS_2_&_3	<p>Condition VI.1, which reads as follows:</p> <p>For EU-BOILER#2 and EU-BOILER#3, the permittee shall monitor and record sulfur dioxide emissions, nitrogen oxides emissions, carbon dioxide emissions, and exhaust gas flow on a continuous basis according to the monitoring requirements in 40 CFR 75. The continuous emission monitoring system (CEMS) for SO₂ (comprising the monitors for sulfur dioxide concentration and for carbon dioxide concentration when monitoring for emissions on a pounds per MMBtu basis; comprising the monitors for sulfur dioxide concentration and for exhaust gas flow when monitoring for emissions on a tons per day basis) shall be used for compliance demonstrations with the SO₂ emission limitations at Conditions I.2, I.3, and I.4 during each calendar day wherein the SO₂ CEMS collects at least one quality-assured monitor operating hour, as defined at 40 CFR 72.2. When an SO₂ CEMS collects at least one hour but less than twenty-four hours of quality assured data (i.e. there are between one and twenty-three hours, inclusive, within the calendar day wherein the SO₂ CEMS is not operating and/or operating “out-of-control”, as defined at 40 CFR 72.2), the permittee shall implement the procedures at Subpart D of 40 CFR 75 to calculate SO₂ emissions for hours wherein quality assured data was not collected. When an SO₂ CEMS fails to collect at least one quality-assured monitor operating hour within a calendar day, the permittee shall determine compliance with the corresponding SO₂ emission limitation at Conditions I.2, I.3, or I.4 by sampling for the heat content and sulfur content of the coal combusted within the emission unit during the calendar day and by determining the amount of coal combusted in the emission unit during the calendar day, using methods acceptable to the AQD.² (R 336.1213(3), R 336.1401(1), 40 CFR 52.21(d), 40 CFR 75, Michigan State Implementation Plan)</p>

The applicant disagrees with the following elements within the sulfur dioxide monitoring program:

1. The precedence given to CEMS data over coal sampling data; applicant requests equal weight be given the data generated from each collection method with either deemed an acceptable compliance method for a given monitoring period;
2. The inability to utilize CEMS data for a compliance demonstration for any given monitoring period.

The applicant offers the following language for Condition VI.1:

For EU-BOILER#2 and EU-BOILER#3, the permittee shall monitor and record sulfur dioxide emissions, nitrogen oxides emissions, carbon dioxide emissions, and exhaust gas flow on a continuous basis according to the monitoring requirements in 40 CFR 75. Compliance with the SO₂ emission limitations at Conditions I.2, I.3, and I.4 shall be determined for each individual boiler on a daily average, based either on data from the SO₂ continuous emission monitor or based on the sulfur

content and heat content of the coal combusted within the emission unit during the calendar day and by determining the amount of coal combusted in the emission unit during the calendar day, using methods acceptable to the AQD.

Applicant notes the suggested language is supported by language incorporated into the sulfur dioxide pound per million Btu limits within Table E-1.3 and Table E-1.4 of ROP 199600209: "Compliance with this limit shall be determined on a daily average based either on data from a continuous emission monitor or based on the sulfur content and heat content in the coal."

AQD finds support for the language within the Draft ROP from Permit to Install (PTI) No. 392-99 (Unit 3), PTI 258-00 (Unit 2), and a U.S. EPA letter of 10/23/1990 issued pursuant to Section 114(a) of the Clean Air Act:

1. Concerning the preferred status given to CEMS data in the Draft ROP – Although Special Condition (SC) 5 of PTI 392-99 states compliance with Unit 3's sulfur dioxide pound per million Btu limit is to be determined based either upon the CEMS or based on the sulfur content and heat content of the coal, SC 4 of PTI 258-00 states compliance with Unit 2's comparable limit is to be determined by CEMS. SC 7 of both PTI 392-99 and 258-00 state SO₂ CEMS data shall be used to determine compliance with sulfur dioxide limits, whether expressed on a pound per million Btu basis or on tons per day (SC 4 and 5 of PTI 258-00) basis. Therefore, while AQD will retain the option to utilize the sulfur content and heat content of coal as a method of compliance, AQD believes restricting its use to periods of CEMS failure meets (what AQD believes to be) the overall intent of the permit to install conditions: to utilize the data from the SO₂ CEMS for compliance with SO₂ emission limits whenever such data is available.
2. Concerning the requirement to utilize coal sampling when a combination of continuous monitors (sulfur dioxide concentration and carbon dioxide concentration in the case of the pound per million Btu limit; sulfur dioxide concentration and exhaust gas flowrate in the case of the tons per day limit) fails to collect one quality-assured monitor operating hour of data – Within the monitoring requirements at 40 CFR 75, the U.S. EPA has established a mechanism to estimate emissions of sulfur dioxide when one or more of the CEMS utilized to measure such emissions malfunctions or fails (and during these hours the CEMS is termed "out-of-control"). Detroit Edison argues the emissions values generated by the Part 75 missing data procedures, as this mechanism is termed, are valid for use in compliance demonstrations with the sulfur dioxide emissions limits established under Rule 401 and the Michigan State Implementation Plan.

AQD disagrees, asserting that the Part 75 missing data procedures do not qualify as a monitoring event for compliance with non-Part 75 regulations. EPA, in a 10/23/1990 Section 114(a) letter to Detroit Edison, concludes continuous compliance with Rule 401 is to be determined by either "daily fuel sampling and analysis" or by the "daily equivalent SO₂ emission rate as determined by the SO₂ CEMS", where "the daily equivalent emission rate average shall be computed from all hourly averages recorded by the SO₂ CEMS during power plant operation." Further, the SO₂ CEMS is to be "calibrated, maintained and operated in accordance with the procedures set forth in Section 40 CFR 60.13(d), (e), (f) and (h) and in Performance Specification 2 (PS2), Appendix B, 40 CFR Part 60." In applying the Part 75 missing data procedures to all hours during a calendar day, Detroit Edison would compute a daily equivalent emission rate absent any hourly average recorded by the SO₂ CEMS, thus, AQD concludes such a procedure does not qualify as a mechanism for determining continuous compliance with Rule 401 or the Michigan State Implementation Plan.

With the above exception, this permit does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by the DNRE

The AQD proposes to approve this permit. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the U.S. Environmental Protection Agency (USEPA) is allowed up to 45 days to review the draft permit and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Ms. Teresa Seidel, Southeast Michigan District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

Purpose

A Staff Report dated July 19, 2010, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Mr. Vinay Bhakkad, Plant Manager 313-297-8218 (Section 1) Mr. Nader Rajabian, Plant Manager – Peakers 313-897-1492 (Section 2)
AQD Contact:	Mr. Jeff Korniski 313-456-4681

Following the 30-day public comment period, the Department of Natural Resources and Environment (DNRE) was abolished and the authority to issue this permit transferred to the Department of Environmental Quality (DEQ). Any references to DNRE or MDNRE in the comments submitted to the AQD are considered to now refer to the DEQ or MDEQ.

The River Rouge Power Plant is owned and operated by the Detroit Edison electric utility, a wholly owned subsidiary of DTE Energy. For the purposes of this addendum any references to Detroit Edison and DTE shall be considered interchangeable.

The majority of the comments in the addendum address the coal-fired electric utility steam generating units (EUSGUs) identified in the draft ROP as emission units EU-BOILER#2 and EU-BOILER#3, but more commonly named Unit 2 and Unit 3, respectively.

References to the United States Environmental Protection Agency (EPA) shall comprise not only the central administration but also the regional offices, including the Region 5 office located in Chicago, IL.

Regulatory Analysis Addendum

In the Regulatory Analysis section of the July 19, 2010 Staff Report, AQD noted certain emission units at the stationary source were potentially subject to the Maximum Achievable Control Technology Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters originally promulgated in Title 40 of the Code of Federal Regulations (CFR), Part 63, Subparts A and DDDDD on September 13, 2004 (69 FR 55218). On July 30, 2007, the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court) issued the mandate to vacate 40 CFR 63, Subpart DDDDD, with the result that the standard was no longer in effect.

In response to the D.C Circuit Court's vacatur and remand, the EPA repromulgated a final rule for this MACT source category in the March 21, 2011 Federal Register with an effective date of May 20, 2011

(76 FR 15608). The same day, EPA initiated a reconsideration process with respect to certain aspects of the standard (76 FR 15266). On May 18, 2011, EPA stayed the effective date of the standard until either the reconsideration process was completed or the proceedings for judicial review had concluded, whichever was earlier (76 FR 28662). Within the reconsideration process, EPA published a proposed rule on December 23, 2011 and established a comment period through February 21, 2012 (76 FR 80598).

On January 9, 2012, the D.C. Circuit Court vacated EPA's stay. As a result, MACT DDDDD is effective as of May 20, 2011 even as EPA's reconsideration process continues. EU-AUX_BOILER, an existing natural gas fired boiler, is subject to MACT DDDDD with an initial compliance date of March 21, 2014 (40 CFR 63.7495). The process heaters of EU-PCI_COALMILLS are direct contact heaters and therefore do not meet the definition of a "process heater" under 40 CFR 63.7575.

In the Regulatory Analysis section of the July 19, 2010 Staff Report, AQD noted EU-BOILER#1, EU-BOILER#2, and EU-BOILER#3 at the stationary source are subject to the Clean Air Interstate Rule NO_x annual trading program pursuant to Rules 802a, 803, 821, and 830 through 834, are subject to the Clean Air Interstate Rule NO_x ozone season trading program pursuant to Rules 802a, 803 and 821 through 826, and are subject to the Clean Air Interstate Rule SO₂ annual trading program pursuant to Rule 420. These rules represent the revisions to the State Implementation Plan (SIP) undertaken to implement the federal CAIR program promulgated on May 12, 2005 (70 FR 25162).

In July 2008, the D.C. Circuit Court found CAIR unlawful, vacated the rule, and remanded CAIR to EPA. Acting on petition, in December 2008, the D.C. Circuit Court remanded CAIR to EPA without vacatur until a replacement rule was finalized which was consistent with the D.C. Circuit Court's opinion. On August 8, 2011, EPA published in the Federal Register (76 FR 48208) the final Cross State Air Pollution Rule (CSAPR); the rule became effective on October 7, 2011. The same day, EPA inserted the NO_x and SO₂ Federal Implementation Plan (FIP) requirements for CSAPR into Subpart X of 40 CFR 52, which contains the language for the Michigan SIP. On December 27, 2011, EPA published (76 FR 80760) and inserted the NO_x Ozone Season FIP requirements for CSAPR into the Michigan SIP. These requirements are included in the SIP at 40 CFR 52.1186(d)(1) and (2) for NO_x, at 40 CFR 52.1186(e)(1) and (2) for NO_x during the ozone season, and 40 CFR 52.1187(c)(1) and (2) for SO₂. However, on December 30, 2011, the D.C. Circuit Court granted motions to stay the FIP requirements pending the resolution of the petitions for review of the CSAPR regulation. The effect of the ruling is the continuation of CAIR until the legal proceedings for CSAPR have concluded, at the least. The ROP will be reopened to introduce the CSAPR regulation, if necessary, under Rule 217.

On December 16, 2011, the EPA Administrator signed the Maximum Achievable Control Technology Standards for Coal- and Oil-fired Electric Utility Steam Generating Units. The standard has been submitted by the EPA for publication in the Federal Register and will be promulgated under 40 CFR 63, Subparts A and UUUUU. EU-BOILER#2 and EU-BOILER#3 at the stationary source are potentially subject to the standard, because MACT UUUUU regulates the emissions of certain HAPs, including mercury, from coal-fired electric utility steam generating units. MACT UUUUU is scheduled to become effective sixty days after publication in the Federal Register. The first compliance date for the standard will be 3 years after the effective date of the standard.

Part 15 of Michigan Air Pollution Control Rules, adopted pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451) addresses new requirements pertaining to mercury in the State of Michigan. These rules limit mercury emissions from electric generation units as of January 1, 2015. Pursuant to Rule 1514(1), the Part 15 requirements are no longer applicable should the EPA publish mercury standards as a final rule in the Federal Register that meet or exceed the Part 15 mercury standards. Therefore, the Part 15 requirements currently applicable to EU-BOILER#2 and EU-BOILER#3 may be superseded.

Summary of Pertinent Comments from the Applicant

AQD received a comment on the draft ROP from the Detroit Edison River Rouge Power Plant by electronic mail on August 17, 2010.

Comment:

Referencing the absence of conformity between the exemptions promulgated in the AQD's administrative rules and those published in the Michigan State Implementation Plan (SIP), Detroit Edison "believes additional language needs to be added to MDEQ's Staff Report to assure the exemptions allowed in the Michigan rules are applied to the facility . . ." In providing an example of such language, Detroit Edison lists exemptions promulgated in AQD's administrative rules that Detroit Edison asserts apply to devices and activities at the River Rouge Power Plant, and also lists devices and activities present at the facility which AQD has classified as "insignificant activities" under Rule 212(2).

Detroit Edison states the comment "does not require a response from AQD – it is meant to document that its our expectation that all the PTI exemption rules are in fact part of the Michigan SIP and permitting program."

AQD's Response:

The AQD declines to modify the Staff Report.

Collectively, AQD's administrative rules beginning with Rule 278 and ending with Rule 290 provide conditional relief to a facility from the requirement to obtain a permit to install under Rule 201(1) for certain activities, so long as the activity qualifies under the language within the specific exemption, is not excluded from consideration for an exemption under Rule 278, and the facility is able to demonstrate the applicability of the specific exemption to the activity under Rule 278a.

Administrative rules added or modified by the AQD are periodically submitted to the EPA for inclusion into the Michigan SIP, which is compiled within Subpart X of 40 CFR 52. As noted within the comment, not all of the permit to install exemptions listed within the AQD's administrative rules are currently published in the SIP. Further, those exemptions currently published within the SIP often represent earlier iterations of administrative rules that have since been modified by the AQD. The most recent "permit to install exemption rule" to be included or updated within the Michigan SIP occurred on August 28, 1981 for Rule 283. The language within Rule 201 itself, last modified by the AQD on June 20, 2008, has not been updated in the SIP since May 6, 1980.

From the comment, the AQD infers a concern on the part of Detroit Edison that the EPA, when enforcing the Michigan SIP, might not affirm exemptions from the permit to install program claimed by Detroit Edison for activities that, though promulgated in the AQD's administrative rules, are not published in the SIP. The AQD acknowledges this possibility and cannot speak to EPA's interpretation of the SIP in such cases. However, the addition of Detroit Edison's proposed language to the Staff Report will not achieve Detroit Edison's stated goal of assuring the listed exemptions will be applied to the facility (by the EPA). The ROP permitting process is not invested with the power to either add to or alter the SIP, and regardless of the mechanism, the final authority to approve or decline an AQD administrative rule for inclusion in the SIP is given to the EPA and not to the AQD. The addition of Detroit Edison's language, as a response to Detroit Edison's comment, only yields a false impression that its inclusion mitigates or alleviates Detroit Edison's concern; therefore, the AQD declines to modify the Staff Report.

Summary of Pertinent Comments from the Citizen Groups

The AQD received several comments on the draft ROP from the National Resources Defense Council, Clean Water Action, Great Lakes Environmental Law Center, MidlandCARES, Progress Michigan, and Sierra Club (collectively self-termed the "Citizen Groups") by electronic mail in a single submittal on August 18, 2010 under the signature of Mr. Shannon Fisk with the National Resources Defense Council.

The comments comprise a forty page letter with sixty-two exhibits attached. In this section of the Staff Report Addendum, the term “commenter” shall refer to the Citizen Groups and the term “comment” shall refer to the August 18, 2010 letter and exhibits (hereafter “Letter” or “Exhibit”) or a portion thereof.

Via email January 9, 2011, the AQD received a three page letter dated January 10, 2011 from Mr. Fisk on behalf of the Citizen Groups. The letter further comments on the draft ROP and is intended to “supplement the Citizen Groups’ August 18, 2010 comment letter” (pg. 1 of the 1/10/2011 letter) In an email response of January 10, 2011, the AQD confirmed receipt “without agreement that the comments are supplemental to the 8/18/2010 comment letter previously submitted.” Having been received after the closing date of the public comment period, the email and letter are not a part of the public record for the ROP renewal and will not be addressed in the Staff Report Addendum.

Comment I (Letter, pgs. 1 through 29):

The commenter asserts Detroit Edison River Rouge has undertaken major modifications, as this term is defined at 40 CFR 52.21(b)(2)(i) and at II.A.5.(i) of Appendix S to 40 CFR 51, to the EUSGUs known as Unit 2 and Unit 3 without first obtaining federal new source review (NSR) permits and without applying NSR requirements, including the establishment of emissions limits based on the best available control technology (BACT) for pollutants subject to the prevention of significant deterioration (PSD) regulation and emission limits based on the lowest achievable emission rate (LAER) for pollutants subject to nonattainment new source review (NA NSR or NNSR).

The comment lists seven activities the commenter believes should have triggered major NSR permitting, including activities beginning in September 2005 at Unit 3 and in March 2006 at Unit 2 for which Detroit Edison submitted outage notices to the AQD, and including five activities Detroit Edison identified before the Michigan Public Service Commission (PSC) as having been conducted, or planned to be conducted, at Unit 2 or Unit 3 within certain time periods from 1994 through 2011. Based on the testimony of Detroit Edison before the PSC, the commenter reports these activities were necessary to replace aging and/or failing equipment with a goal to increase the availability and reliability of the units and thus extend the operational viability of the plant beyond the duration imparted by its original design.

The commenter concludes the listed capital expenditures at Detroit Edison River Rouge do not qualify as routine maintenance, repair, or replacement (RMRR) as this term is used at 40 CFR 52.21(b)(2)(iii)(a) and at II.A.5.(iii) of Appendix S to 40 CFR 51. The commenter argues EPA applies the RMRR exception narrowly, quotes EPA guidance in support, contends the federal courts have upheld EPA’s application of RMRR, and lists activities at EUSGUs determined to be outside the scope of RMRR. The commenter contends the listed activities are similar to the capital expenditures undertaken by Detroit Edison River Rouge on Unit 2 and Unit 3, thus demonstrating the projects do not qualify as RMRR.

After reviewing federal NSR history, the commenter analyzes NSR pre-outage and post-outage emission reports submitted by Detroit Edison to the AQD and asserts the projects associated with the September 2005 outage at Unit 3 and the March 2006 outage at Unit 2 caused significant emissions increases, as this term is defined at 40 CFR 52.21(b)(40) and at II.A.23 of Appendix S to 40 CFR 51, of nitrogen oxides (NO_x) and sulfur dioxide (SO₂) at Unit 3 and SO₂ at Unit 2. Concerning the remaining activities identified in the comment, the commenter states the AQD must evaluate each activity “and any other physical changes that Detroit Edison has undertaken at the River Rouge Coal Plant [for NSR applicability] . . . and subject such evaluation to public review and comment.” Further, for those activities conducted by Detroit Edison where the submission of NSR emission reports are lacking, the commenter directs the NSR applicability analyses be performed under the “actual-to-potential test”, as commenter argues the facility has thus forfeited any access to the “actual-to-future-actual test” in such cases. (Letter, pg. 28)

In support of these claims, the commenter references a Notice of Violation and Finding of Violation (NOV/FOV) issued by the U.S. EPA Region 5 on 7/24/2009 to DTE Energy finding the River Rouge Power Plant (among others in the DTE Energy system) in violation of PSD and NA NSR requirements for SO₂, NO_x, and/or particulate matter (PM) at Unit 2 and Unit 3. The commenter notes the AQD relies on

the NOV/FOV to likewise find Detroit Edison River Rouge not in compliance with major NSR regulations in agency reports dated 9/25/2009 and 3/11/2010 reviewing the annual NSR emission reports submitted by Detroit Edison for calendar years 2008 and 2009, respectively.

Having concluded the facility has triggered major NSR at Unit 2 and Unit 3, the commenter argues AQD “should require Detroit Edison to disclose all information about all modifications at its facilities as part of providing a full and complete [Title V] application” (Letter, pg. 29) and that “the Title V permit should include an enforceable schedule of compliance for PSD and/or NNSR permitting to occur as well as emission and operational standards equivalent to a new facility in this source category.” (Letter, pg. 2)

AQD’s Response to Comment I:

The AQD will begin with an overview of the NSR regulations and will follow with NSR analyses of the projects identified within the comment.

New Source Review (NSR) Overview

The regulation governing the implementation of the PSD of air quality is codified at 40 CFR 52.21 and covers the emissions of NSR regulated pollutants in an attainment area. The regulation governing the implementation of NA NSR is codified within the Emission Offset Interpretive Ruling at Appendix S of 40 CFR 51 and covers the emissions of NSR regulated pollutants in nonattainment areas. Collectively, the two programs are commonly referred to as the NSR program, or sometimes major NSR program to distinguish it from a minor source preconstruction permitting program within a State (e.g. the AQD’s permit to install, or PTI, program in Michigan).

Effective 12/4/2006 and 6/20/2008, respectively, the AQD adopted major NSR regulations into the Part 18 (PSD) and Part 19 (NA NSR) administrative rules; the adopted rules are consistent with the federal regulations. As the majority of activities under investigation occurred prior to December 2006, this discussion is framed within the context of the AQD’s delegated authority to implement the federal NSR program in the State of Michigan; thus, only the federal language will be cited. Further, the PSD and NA NSR definitions and applicability language are similar where, as in this case, the facility is one of the listed source categories at 40 CFR 52.21(b)(1)(i)(a) and the area is not, and has not been, classified as a serious, severe, or extreme nonattainment area at II.A.4.(i)(a) of Appendix S to 40 CFR 51. In general, the PSD language and procedures will be cited here with the understanding the equivalent language and procedures are embodied for NA NSR review within 40 CFR 51, Appendix S. Finally, it is noted the definitions for terms utilized in the PSD and NA NSR regulations are grouped within 40 CFR 52.21(b) and II.A of Appendix S to 40 CFR 51; these citations will not be reproduced with the introduction of each term or each reference to the definition of a term, but may be employed to highlight a particular paragraph or phrase of an extended definition.

There are two specifics to be noted regarding the Detroit Edison River Rouge Power Plant before proceeding further with the general NSR overview. First, the plant is located in Wayne County, Michigan. Wayne Co. has been in attainment with the nitrogen dioxide (NO₂) National Ambient Air Quality Standard (NAAQS) since 3/3/1978, in attainment with the SO₂ NAAQS since 10/20/1982, and in attainment with the PM₁₀ (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) NAAQS since 10/4/1996. Wayne Co. has been in nonattainment with the PM_{2.5} (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) NAAQS since 12/17/2004. Though currently in attainment, Wayne Co. has in the past been classified nonattainment for carbon monoxide (CO), ozone, PM, and PM₁₀. Therefore, both the PSD and the NA NSR regulations are potentially applicable to the River Rouge Power Plant, depending on the timing of the projects and depending on the type and magnitude of emissions increases, if any, from those projects.

Second, the Detroit Edison River Rouge plant meets the definition of an existing “major stationary source” under both the PSD and NA NSR regulations because the facility is a fossil-fuel fired steam electric plant of more than 250 million British thermal units per hour heat input emitting more than 100 tons per year of a regulated NSR pollutant for which Wayne Co. is currently in attainment (e.g. carbon

monoxide) and more than 100 tons per year of a regulated pollutant for which Wayne Co. is currently in nonattainment (e.g. PM_{2.5}). Therefore, the NSR discussion will focus on the applicability procedures relevant to an existing major stationary source and omit the applicability procedures relevant to new major stationary sources.

The applicability procedures for PSD and NA NSR are listed at 40 CFR 52.21(a)(2) and IV.I of Appendix S to 40 CFR 51, respectively. For existing major stationary sources, the NSR regulations are applicable to “any project”, where a “project” is defined as “a physical change in, or change in the method of operation of, an existing major stationary source”. The preconstruction permit and emissions standards (BACT and LAER) paragraphs of the regulations apply only to a project that qualifies as a “major modification for a regulated NSR pollutant”, meaning that the project would cause both a “significant emissions increase” and a “significant net emissions increase” of that pollutant. The terms “significant emissions increase” and “significant net emissions increase” may diverge for a pollutant through an NSR process known as “netting”, whereby qualifying, otherwise unrelated, emissions reductions of that same pollutant at the facility may be deducted from the significant emissions increase related to a particular project, thereby preventing the occurrence of a significant net emissions increase and thus preventing the project from classification as a major modification for that pollutant. Such an occurrence is commonly referred to as “netting out” of NSR for that pollutant.

Within the definition of “major modification”, activities in the realm of “[r]outine maintenance, repair, and replacement”, or RMRR, are not to be considered included in the scope of “a physical change or change in the method of operation.” As a “major modification” cannot exist absent “a physical change or change in the method of operation”, RMRR activities are thus exempt from the NSR regulations regardless of the emissions associated with the activities. However, the term RMRR is not defined in the NSR regulations.

A significant net emissions increase occurs when the emissions of a regulated NSR pollutant after the project exceed the emissions of the same pollutant before the project by a “significant” amount. For CO, NO_x, SO₂, PM, PM₁₀, and PM_{2.5} the significant emission rates are established on an yearly basis and are 100 tons, 40 tons, 40 tons, 25 tons, 15 tons, and 10 tons, respectively. To determine if a project would cause a significant net emissions increase the facility may employ either the “actual-to-potential” or the “actual-to-projected-actual” test to compare pollutant emissions prior to, and after, the project. In both tests, actual emissions prior to the project are termed “baseline actual emissions” and for an EUSGU is determined by the “average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project” unless an alternative period prior to the 5-year window is granted by the Administrator of the EPA. (40 CFR 52.21(b)(48)(i)) The baseline period is commonly referred to as the “2-in-5” baseline.

Under the “actual-to-potential” test, emissions following the project are determined by the EUSGU’s “potential to emit”, or the maximum capacity of the EUSGU to emit a pollutant under its physical and operational design, considering any federally enforceable limitations on the design.

Under the “actual-to-projected-actual” test, emissions following the project are termed the “projected actual emissions” and are determined by “the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.” (40 CFR 52.21(b)(41)(i)) However, in determining the projected actual emissions, the facility is permitted to “exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48)

["baseline actual emissions" defined] of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth;" (40 CFR 52.21(b)(41)(ii)(c))

The methodology for determining NSR applicability at 40 CFR 52.21(a)(2)(iv)(b) contains the dual elements of a prospective analysis and a retrospective analysis.

The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

Thus, for example, should a facility choose the actual-to-projected-actual test to determine the NSR standing of a project, an initial analysis is to be performed by the facility prior to the commencement of actual construction to determine if it is likely the project will result in both a significant increase and a significant net increase in emissions of a regulated NSR pollutant. If in the affirmative, an NSR permit is required and must be obtained before the facility commences actual construction. If in the negative, the project may proceed without first obtaining an NSR permit. However, if in the negative, should the post-project actual emissions be of such magnitude to determine the project has caused both a significant emissions increase and a significant net emissions increase, then a major modification has occurred and an NSR permit is required, no matter the pre-project result (which necessarily relies on an estimate for post-project emissions and therefore may be flawed). The window for the post-project evaluation period extends 5 years after the emission unit resumes regular operation following the project: "[EPA] will presume that any increases that occur after 5 years are not associated with the physical or operational changes" (67 FR 80197) The post-project evaluation period extends to 10 years if the project increased the design capacity of the emission unit.

40 CFR 52.21(r)(6) specifies recordkeeping and reporting associated with the actual-to-projected-actual test whenever "there is a reasonable possibility, within the meaning of paragraph (r)(6)(vi) of this section, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) of this section for calculating projected actual emissions."

The term "reasonable possibility" is explained at 40 CFR 52.21(r)(6)(vi), (r)(6)(vi)(a), and (r)(6)(vi)(b):

(vi) A "reasonable possibility" under paragraph (r)(6) of this section occurs when the owner or operator calculates the project to result in either:

(a) A projected actual emissions increase of at least 50 percent of the amount that is a "significant emissions increase," as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or

(b) A projected actual emissions increase that, added to the amount of emissions excluded under paragraph (b)(41)(ii)(c) of this section, sums to at least 50 percent of the amount that is a "significant emissions increase," as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant.

For a project for which a reasonable possibility occurs only within the meaning of paragraph (r)(6)(vi)(b) of this section, and not also within the meaning of paragraph (r)(6)(vi)(a) of this section, then provisions (r)(6)(ii) through (v) do not apply to the project.

Recordkeeping and reporting provisions at 40 CFR 52.21(r)(6)(i) through (iv) are potentially applicable to EUSGUs and, as indicated above, are dependent both on whether a reasonable possibility exists and, if so, why it exists:

(i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:

(a) A description of the project;

(b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

(c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.

(ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the Administrator. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the Administrator before beginning actual construction.

(iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(i)(b) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit.

(iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Administrator within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

Thus, when a "reasonable possibility" exists because projected actual emissions show an increase equal to or in excess of 50 percent of a significant emissions increase, the facility must maintain a record of the project in accordance with (r)(6)(i), submit this record to the AQD prior to the project in accordance with (r)(6)(ii), monitor calendar year emissions in accordance with (r)(6)(iii), and submit the data annually to the AQD in accordance with (r)(6)(iv). The annual tracking is to continue for a period of up to 5 (or 10) years after the resumption of normal operations, to comport with the post-project evaluation period set by the EPA at 67 FR 80197. When the projected actual emissions increase does not equal or exceed 50 percent of a significant emissions increase but for the addition of excluded emissions, a "reasonable possibility" exists, but the facility must only maintain a record of the project in accordance with (r)(6)(i).

NSR applicability is an evolving structure last overhauled with the 2002 NSR reforms promulgated on 12/31/2002 at 67 FR 80186. Prior to 1992 EPA grounded NSR applicability entirely on the "actual-to-potential" test. On 7/21/1992 EPA introduced the "actual-to-future-actual" test into the NSR regulations

in response to a Wisconsin Electric Power Co. case in the U.S. Court of Appeals' Seventh Circuit; the court decision is commonly known as the "WEPCO case" just as the applicability test is commonly known as the "WEPCO rule". For a modified, existing EUSGU only, the WEPCO rule allowed the EUSGU's "potential to emit" to be substituted with the unit's "representative actual annual emissions", the precedent of "projected actual emissions". To be determined by the "average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit . . .", EPA initiated within "representative actual annual emissions" the ability to exclude from NSR accounting those emissions able to be accommodated by the emission unit absent of, and unrelated to, the activity under review. (40 CFR 52.21(b)(33), 7/1/2001 edition) Under WEPCO, the "actual-to-future-actual" option was available to an EUSGU "provided the source owner or operator maintains and submits to the Administrator on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase . . ." (40 CFR 52.21(b)(21)(v), 7/1/2001 edition)

With the 2002 NSR reforms, EPA made available the "actual-to-future-actual" test to existing EUSGUs and existing non-EUSGUs alike, renamed it the "actual-to-projected-actual" test, replaced "representative actual annual emissions" with "projected actual emissions", clarified the post-project annual emissions monitoring and tied its need only to "circumstances where there is a reasonable possibility that a project that is not a part of a major modification may result in a significant emissions increase . . ." (40 CFR 52.21(b)(r)(6), 7/1/2004 edition) The term "reasonable possibility" remained undefined until EPA adopted the current 40 CFR 52.21(b)(r)(6)(vi) on 12/21/2007 at 72 FR 72607.

Within this framework the AQD evaluates the applicability of the NSR regulations to the various activities quoted by the commenter at Detroit Edison River Rouge. The evaluation will begin with a brief discussion regarding AQD's application of RMRR and netting to the collection of projects, in general. The AQD will then proceed with analyses of the September 2005 project at Unit 3 and the March 2006 project at Unit 2. The analyses will start with a summary of the projects themselves and the NSR reports submitted by Detroit Edison River Rouge relating to the projects, and will be followed sequentially by a pre-project analysis for Unit 2, a pre-project analysis for Unit 3, and a combined discussion of the post-project analyses for Units 2 and 3. The discussion will then shift to NSR applicability for the additional activities presented in the comment. AQD will then address the influence of the EPA NOV/FOV on the analyses presented and conclude with a response to the commenter's views regarding the impact of the NSR applicability question on the ROP renewal application.

Routine Maintenance, Repair, and Replacement (RMRR)

RMRR is not defined within the NSR regulations; thus, the burden to clarify the term has devolved, first, to the EPA through agency determinations and, second, to the federal courts through litigation, often on a project-by-project basis. Citing various EPA determinations and court decisions in support, the commenter concludes the capital expenditures at Detroit Edison River Rouge do not constitute RMRR. (Letter, pgs. 7 through 12)

The AQD has not rendered, and does not render here, judgment regarding the application of RMRR to the activities at Detroit Edison River Rouge cited by the commenter, which include projects undertaken by the facility during the 2005 outage at Unit 3 and the 2006 outage at Unit 2. For the purpose of the NSR analyses in this discussion the AQD presumes the activities do not qualify as RMRR and therefore comprise physical changes and/or changes in the method of operation under the definition of "major modification". In doing so, the AQD adopts the commenter's position regarding RMRR without evaluating the validity of the commenter's arguments relating to RMRR in the context of the projects conducted at Detroit Edison River Rouge.

The commenter's overarching claim is that the projects conducted at Detroit Edison River Rouge triggered major NSR and that the facility inappropriately initiated the projects without first obtaining the requisite major NSR permits. The commenter offers the RMRR discussion to counter a potential

endeavor to dismiss the NSR claims by virtue of the RMRR exception; in the commenter's view, the projects cited do not qualify. By adopting the commenter's RMRR position for this discussion a dismissal of the commenter's NSR claims on the basis of RMRR is no longer at issue; consequently, the AQD is not compelled to further evaluate the veracity of the commenter's theories on the application, or misapplication, of RMRR to the projects undertaken at Detroit Edison River Rouge.

Netting

Detroit Edison River Rouge has not introduced netting into the NSR notifications provided to the AQD regarding recent activities at Unit 2 and Unit 3. Therefore, the AQD will not evaluate potential netting exercises (presuming any exist) for these projects in this discussion and the AQD will conclude any significant emissions increase identified also represents a significant net emissions increase.

As previously explained, in order for a major modification to exist a project must be the cause of both a significant emissions increase and a significant net emissions increase. The NSR process known as netting allows a stationary source the opportunity to deduct certain qualifying emissions from a project's significant emissions increase when calculating the project's net emissions increase; should the deduction result in a net emissions increase that is below the significance level for that particular NSR pollutant, the project is no longer classified as a major modification for that pollutant, because while there remains a significant emissions increase for that pollutant there no longer remains a significant net emissions increase for that pollutant.

A netting exercise only alters the amount attributed to the net emissions increase and does not alter the original emissions increase itself. As a result, while a project might "net out" of NSR by reducing the net emissions increase below the significance level, it is not possible for the reverse to occur; that is, it is not possible for a project whose original increase is less than significant to "net into" NSR through the netting process, because although a netting exercise might raise the net emissions increase to a level in excess of significant the netting exercise cannot alter the quantity of the original, less than significant, increase. Therefore, the netting exercise cannot create the conditions for a major modification where they did exist prior to the inception of the netting exercise.

The commenter's overarching claim is that certain projects initiated at Detroit Edison River Rouge triggered major NSR and the facility has never obtained the requisite major NSR permits for those projects. AQD's decision to forgo an investigation into potential netting analyses for these projects does not adversely affect the commenter's claim, because a netting analysis can only withdraw, and cannot add to, the projects within the domain of the commenter's claim.

The Unit 3 Outage of September 2005 and the Unit 2 Outage of March 2006

Detroit Edison River Rouge commenced a planned outage at Unit 3 on or about September 16, 2005. August 2005 immediately precedes the month when Detroit Edison River Rouge began actual construction of the project, therefore, the window for the baseline period is September 2000 through August 2005, inclusive, with the first baseline period ending August 2002 and the last ending August 2005. Unit 3 resumed operation in November 2005.

Detroit Edison River Rouge commenced a planned outage at Unit 2 on or about March 17, 2006. February 2006 immediately precedes the month when Detroit Edison River Rouge began actual construction of the project, therefore, the window for the baseline period is March 2001 through February 2006, inclusive, with the first potential baseline period ending February 2003 and the last potential baseline period ending February 2006. Unit 2 resumed operation in May 2006.

The AQD received and reviewed the following reports from Detroit Edison relating to these outages:

*For Unit 3, an initial outage notification dated 9/9/2005 was received by AQD on 9/13/2005. Detroit Edison selects a baseline period of 1/2001 through 12/2002 for NO_x, SO₂, and PM. Future actual emissions are projected for 1/2006 through 12/2006 for NO_x, SO₂, and PM.

*For Unit 3, a 2005 annual emissions report dated 2/24/2006 was received by AQD on 2/28/2006. Actual emissions of NO_x, SO₂, and PM are reported for calendar year 2005 for Unit 3.

*For Unit 2, an initial outage notification dated 3/15/2006 was received by AQD on 3/17/2006. Detroit Edison selects a baseline period of 1/2002 through 12/2003 for NO_x, SO₂, and PM. Future actual emissions are projected for 1/2007 through 12/2007 for NO_x, SO₂, and PM.

*For Unit 2, a corrected initial outage notification dated 1/9/2007 was received by AQD on 1/18/2007. Detroit Edison selects a baseline period of 1/2004 through 12/2005 for NO_x, SO₂, and PM. Future actual emissions are projected for 1/2007 through 12/2007 for NO_x, SO₂, and PM.

*For Units 2 and 3, a 2006 annual emissions report dated 2/15/2007 was received by AQD on 2/23/2007. Actual emissions of NO_x, SO₂, and PM are reported for calendar year 2006 for each unit.

*For Units 2 and 3, a 2007 annual emissions report dated 2/27/2008 was received by AQD on 3/3/2008. For Unit 3, Detroit Edison amends the NO_x baseline to 9/2000 through 8/2002. Actual emissions of NO_x, SO₂, and PM are reported for calendar year 2007 for each unit.

*For Units 2 and 3, a 2008 annual emissions report dated 2/21/2009 was received by AQD on 2/26/2009. For Unit 3, Detroit Edison amends the NO_x baseline to 7/2000 through 6/2002 and amends the SO₂ baseline to 6/2001 through 5/2003. Actual emissions of NO_x, SO₂, and PM are reported for calendar year 2008 for each unit.

*For Units 2 and 3, a 2009 annual emissions report dated 2/26/2010 was received by AQD on 3/2/2010. For Unit 2, Detroit Edison amends the NO_x baseline to 6/2002 through 5/2004, amends the SO₂ baseline to 3/2002 through 2/2004, and amends the PM baseline to 6/2001 through 5/2003. For Unit 3, Detroit Edison amends the PM baseline to 9/2000 through 8/2002. Actual emissions of NO_x, SO₂, and PM are reported for calendar year 2009 for each unit.

*For Units 2 and 3, a 2010 annual emissions report dated 2/23/2011 was received by AQD on 2/28/2011. Actual emissions of NO_x, SO₂, and PM are reported for calendar year 2010 for each unit.

Emissions data relating to the outages and reported to the AQD by Detroit Edison in the NSR reports are summarized below. In addition, AQD reviewed monthly SO₂ and NO_x emissions data submitted to the EPA's Clean Air Markets Division (CAMD) pursuant to the Acid Rain regulation; this data is available to the public through the EPA's CAMD website. Detroit Edison's submissions to EPA CAMD corroborate, within a few tons, the emissions data submitted to the AQD. The Clean Air Markets emissions data is also given below.

In each table, AQD has highlighted in bold the emission levels of note. For each pollutant, these figures are the highest accepted baseline values, the resultant emissions thresholds to trigger a major modification under NSR, the highest accepted projected emissions, and the highest reported calendar year emissions. AQD does not accept either the corrected projected actual estimates submitted by Detroit Edison River Rouge for Unit 2 or the amended NO_x baseline of 7/2000 through 6/2002 (3,458 tons) for Unit 3.

Projected actual emissions are meant to be an estimate of future activity and are to be calculated prior to commencement of the project: "[i]n determining the projected actual emissions under paragraph (b)(41)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:" (40 CFR 52.21(b)(41)(ii)) In submitting the corrected projected actual emissions on

1/9/2007 Detroit Edison seeks to alter the projections after the commencement of the project at Unit 2 in March 2006, in contravention of the NSR regulations.

Unit Emissions Data from NSR Reports (in tons)

Time Period (with report date)		Unit 2			Unit 3		
		SO ₂	NO _x	PM	SO ₂	NO _x	PM
Unit 2	1/02 – 12/03 original baseline (3/15/06)	8,331	2,317	104	-----	-----	-----
	1/04 – 12/05 corrected baseline (1/9/07)	7,318	2,150	93	-----	-----	-----
	3/02 – 2/04 amended SO ₂ baseline (2/26/10)	8,413	-----	-----	-----	-----	-----
	6/02 – 5/04 amended NO _x baseline (2/26/10)	-----	2,472	-----	-----	-----	-----
	6/01 – 5/03 amended PM baseline (2/26/10)	-----	-----	122	-----	-----	-----
	1/07 – 12/07 projected actual (3/15/06)	7,893	2,195	98	-----	-----	-----
	1/07 – 12/07 corrected projected actual (1/9/07)	7,047	2,070	90	-----	-----	-----
Unit 3	1/01 – 12/02 original baseline (9/9/05)	-----	-----	-----	7,598	3,076	144
	9/00 – 8/02 amended NO _x baseline (2/27/08)	-----	-----	-----	-----	3,284	-----
	7/00 – 6/02 amended NO _x baseline (2/21/09)	-----	-----	-----	-----	3,458	-----
	6/01 – 5/03 amended SO ₂ baseline (2/21/09)	-----	-----	-----	8,094	-----	-----
	9/00 – 8/02 amended PM baseline (2/26/10)	-----	-----	-----	-----	-----	164
	1/06 – 12/06 projected actual (9/9/05)	-----	-----	-----	7,849	3,178	149
NSR significant emission rate		40	40	25	40	40	25
NSR major modification threshold		8,453	2,512	147	8,134	3,324	189
2005 calendar year actual emissions (2/24/06)		-----	-----	-----	5,064	2,037	89
2006 calendar year actual emissions (2/15/07)		5,730	1,430	35	7,577	2,537	52
2007 calendar year actual emissions (2/27/08)		7,181	2,024	23	7,416	3,276	24
2008 calendar year actual emissions (2/21/09)		6,639	2,120	35	7,854	3,319	130
2009 calendar year actual emissions (2/26/10)		7,481	1,462	68	7,464	2,878	153
2010 calendar year actual emissions (2/23/11)		7,455	1,456	97	6,966	2,913	29

Unit Emissions Data from EPA's CAMD Website (in tons)

Time Period		Unit 2		Unit 3	
		SO ₂	NO _x	SO ₂	NO _x
Unit 2 baseline (SO ₂ : 3/02 – 2/04; NO _x : 6/02 – 5/04)		8,413.3	2,472.3	-----	-----
Unit 3 baseline (SO ₂ : 6/01 – 5/03; NO _x : 9/00 – 8/02)		-----	-----	8,093.9	3,284.1
NSR significant emission rate		40	40	40	40
NSR major modification threshold		8,453.3	2,512.3	8,133.9	3,324.1
2005 calendar year		-----	-----	5,064.4	2,037.8
2006 calendar year		5,730.0	1,429.7	7,576.7	2,537.3
2007 calendar year		7,182.3	2,023.9	7,415.1	3,276.3
2008 calendar year		6,639.5	2,118.2	7,853.8	3,316.7
2009 calendar year		7,481.3	1,461.9	7,464.1	2,878.4
2010 calendar year		7,455.8	1,456.4	6,966.3	2,913.9

Detroit Edison's proposed NO_x baseline period of 7/2000 through 6/2002 for Unit 3 begins prior to the 2-in-5 baseline window (9/2000 through 8/2005) established at 40 CFR 52.21(b)(48)(i). Though an alternative time period may be granted by the reviewing authority "upon a determination that it is more representative of normal source operation", Detroit Edison has not convinced the AQD that the period of 7/2000 through 6/2002 better represents the normal operation of the River Rouge Power Plant than each and every 24-month consecutive period within the 2-in-5 baseline window. Detroit Edison argues consumers sought power from independent power generators in the wake of favorable legislation in the early to mid-2000s, resulting in diminished output at DTE Energy facilities during this timeframe. AQD concludes Detroit Edison's premise of depressed demand is suited for arbitration within the realm of "excluded" emissions at 40 CFR 52.21(b)(41)(ii)(c), should Detroit Edison choose to present it as such. Detroit Edison might successfully argue that post-project emissions increases are but a reflection of

recaptured demand, not a consequence of the physical changes in question, and therefore merit exclusion from the NSR analysis. However, AQD does not find cause to extend the baseline period beyond the 2-in-5 window established under NSR.

The commenter, in reviewing the outage notifications and the subsequent annual emissions reports, finds Detroit Edison River Rouge in violation of the NSR regulations at both Unit 2 and Unit 3. AQD, in reviewing these same reports, has not found and does not now find a violation at either Unit 2 or Unit 3, as explained in the sections to follow.

Pre-Project NSR Analysis for Unit 2

The initial notification for the March 2006 outage at Unit 2 projects maximum calendar year emissions of 7,893 tons SO₂, 2,195 tons NO_x, and 98 tons PM in 2007. Actual emissions for the chosen baseline of January 2002 through December 2003 total 8,331 tons SO₂, 2,317 tons NO_x, and 104 tons PM. As the projected actual emissions are less than baseline actual emissions for each pollutant, the AQD finds no evidence to conclude this activity caused a major modification at Unit 2.

The commenter, in analyzing the Unit 2 NSR reports, lists projected actual emissions at 7,047 tons SO₂, 2,070 tons NO_x, and 90 tons PM, and baseline emissions at 7,318 tons SO₂, 2,150 tons NO_x, and 93 tons PM (Letter, pg. 28). These figures are taken from the “corrected” outage notification dated January 9, 2011 by Detroit Edison and submitted approximately eight months after the resumption of normal operations at Unit 2 in May 2006. The projections revise the forecasted maximum calendar year emissions (again for 2007) and the baseline period is altered to January 2004 through December 2005. The projected actual emissions remain less than the baseline actual emissions and therefore the AQD finds no evidence to alter the agency’s previous determination. Further, the AQD finds no evidence in the comment that the commenter uncovers an NSR violation within the Unit 2 outage notification, intrinsic to itself, and therefore the AQD finds no evidence the commenter disputes AQD’s pre-project NSR determination. (Letter, pgs. 27 and 28)

Pre-Project NSR Analysis for Unit 3

The initial notification for the September 2005 outage at Unit 3 projects maximum calendar year emissions of 7,849 tons SO₂, 3,178 tons NO_x, and 149 tons PM in 2006. Actual emissions for the chosen baseline of January 2001 through December 2002 total 7,598 tons SO₂, 3,076 tons NO_x, and 144 tons PM. The projected emissions exceed their respective baseline emissions by 251 tons SO₂, 102 tons NO_x, and 5 tons PM. The SO₂ and NO_x increases each exceed the 40 tons per year NSR significance level for these pollutants. Detroit Edison does not report a major modification at Unit 3, explaining as follows: (Exhibit 4, pg. 2):

“Projected actual emissions,” as defined in 40 CFR 52.21(b)(41), are also shown in **Table 1**, along with a comparison of projected and baseline actual emissions. This comparison shows that the projects will not result in an emissions increase. . . . The projected maximum post-outage annual utilization (estimated to occur in 2006) was obtained from the PROMOD [i.e., production cost model output, as explained by Detroit Edison] that is performed each year to establish the Detroit Edison 5-year generation plant. As required under the [NSR] regulation, we then excluded from the PROMOD projections *“any portion of the emissions increase that could have been accommodated ... and is unrelated to the change,”* including increases due to demand and market conditions or fuel quality per 40 CFR 52.21(b)(41)(ii)(c). (See **Table 1.**) [emphasis in original]

In the aforementioned Table 1, included within the outage notification, Detroit Edison records 251 tons SO₂, 102 tons NO_x, and 5 tons PM under a column entitled “Emissions Excluded per 40 CFR 52.21(b)(41)(ii)(c)” while a column entitled “Projected Actual Emissions per 40 CFR 52.21(b)(41)(ii)” totals emissions for SO₂, NO_x, and PM at 7,598 tons, 3,076 tons, and 144 tons PM, respectively. (Exhibit 4, pg. 5) By Detroit Edison’s analysis the emissions change as a result of the project is zero tons for each pollutant and therefore the project is not classified as a major modification to Unit 3.

AQD reviewed the outage notification and concluded in agency report A-WC-02954: “[a]bsent at this time information demonstrating the Detroit Edison’s projections are misallocated to 52.21(b)(41)(ii)(c), [AQD] agree[s] the emissions increases do not represent a major modification requiring a federal PSD permit pursuant to 40 CFR 52.21. (Exhibit 29, pg. 4)

The commenter, in analyzing the Unit 3 NSR reports, references the projected actual emissions and baseline emissions in the Unit 3 outage notification and states: “Detroit Edison’s own Planned Outage Notification predicted that, post-modification, Unit 3 would emit 251 tons per year more SO₂ and 102 tons per year more NO_x than in company’s selected baseline . . . well in excess of the emissions increase thresholds for triggering major source PSD and NNSR requirements.” (Letter, pg. 25) The commenter rejects Detroit Edison’s claims for exclusion because “Detroit Edison has provided no basis for its claim that these significant projected emissions increases are due to demand growth or other factors unrelated to the modifications”, “the available evidence reveals that the increases are not due to demand growth”, and “Detroit Edison’s post-outage reports show emissions increases at Unit 3” (Letter, pg. 26) The commenter concludes “Detroit Edison’s claims that increased utilization and emissions from Unit 3 are due to demand growth are unsupported and the evidence strongly supports a conclusion that such increases are actually attributable to the modifications that Detroit Edison undertook at Unit 3.” (Letter, pg. 27) The commenter’s first two critiques relate to the initial outage notification and will be reviewed here. The commenter’s third critique relating to post-project actual emissions were obviously not known at the time of the pre-outage review and therefore are not a part of the pre-project analysis; post-project emissions will be examined in the following section.

Commenter’s first contention is that Detroit Edison claims exclusion for the SO₂ and NO_x emissions increases but provides no justification for the claim. For example, Detroit Edison does not state whether the emissions increase of SO₂ is categorically due to demand growth, a change in fuel quality, a utilization shift in the Detroit Edison fleet, some other factor, or ratios of these factors in combination. Detroit Edison’s argument for exclusion asserts only that the increase is due to one or more of these factors and is not due to the project at hand. The commenter infers the lack of supporting information is fatal to Detroit Edison’s line of reasoning and accordingly the AQD should reject the claim.

This question was recently litigated before the U.S. District Court for the Eastern District of Michigan in *United States v. DTE Energy Co., et al.*, 2:10-cv-13101-BAF-RSW (E.D. Mich. Aug. 23, 2011), hereafter referred to as *U.S. v. DTE*. Plaintiff United States of America (“Plaintiff”, for this discussion) and Intervenor-Plaintiffs Natural Resources Defense Council, Inc. and Sierra Club brought action under the Clean Air Act against Defendants DTE Energy Company and Detroit Edison Company (“Defendants” or “Detroit Edison Monroe”, for this discussion) alleging Detroit Edison Monroe caused a major modification at EUSGUs installed at the Monroe Power Plant during an outage beginning March 13, 2010.

The issue in *U.S. v. DTE* parallels the issue at Unit 3. Defendants own and operate both the River Rouge Power Plant and the Monroe Power Plant. Intervenor-plaintiffs are party to the comments for the River Rouge Power Plant draft ROP. Both facilities fall under the jurisdiction of the U.S. District Court for the Eastern District of Michigan. *U.S. v. DTE* is reviewed under the NSR regulations within the AQD’s administrative rules and the Michigan SIP; the Court’s review transfers to the River Rouge Unit 3 because the administrative rules within the Michigan SIP are as stringent as the federal NSR regulations. In question is the adequacy of an outage notice for a coal-fired EUSGU. Plaintiffs’ suit is grounded in the professed inadequacy of pre-outage notification submitted by the Defendants. Defendants’ defense relies on the sufficiency of the notice being upheld.

On March 12, 2010, Defendants mailed a “pre-project notification” letter, also referred to as a “Notice Letter,” to the Michigan Department of Environmental Quality, informing the agency of the projects at issue. The Notice Letter predicted an annual post-project emissions increase, but asserted that the emissions increase was unrelated to the projects. (*U.S. v. DTE*, pg. 8)

Commenter's complaint, that Detroit Edison provided no basis for its claim that the emissions increases at Unit 3 were properly excluded from the category of projected actual emissions, is raised by the Plaintiff in this case:

Plaintiff argues that the text of the Notice Letter provides no analysis specific to the project and no explanation of why any emissions were excluded. Plaintiff contends that while under the rules Defendants may exclude a portion of the projected emissions increase from the calculation, Mich. Admin. Code R. 336.2801(II), it must then provide the "reason for excluding that amount." See Mich. Admin. Code R. 336.2818(3)(a)(iii). Plaintiff argues that while Defendants projected a large emissions increase, they failed to provide any explanation of their basis for excluding emissions in their final calculation. (*U.S. v. DTE*, pg. 11)

Consequently, "[p]laintiff contends that Defendants were required to obtain a permit from the Michigan Department of Environmental Quality prior to construction, because their projects constituted a major modification to the units at issue." (*U.S. v. DTE*, pg. 8)

In response, the Defendants argued a pre-construction NSR permit was not required because the initial notification letter for Detroit Edison Monroe outage contained all of the necessary information required within the NSR regulations:

Defendants acknowledge that they did not obtain a pre-construction permit. They argue that they were not required to do so because they satisfied their obligations by projecting their post-construction emissions, determining that those projections did not indicate a major modification, reporting these projections to the Michigan Department of Environmental Quality through the submission of a "Notice Letter," and monitoring their emissions post-project. Defendants further argue that so long as certain pre-project requirements are met, NSR is triggered only if the project in question *causes* an emissions increase, which then demonstrates that the project is *per se* a "major modification." . . . That determination, however, cannot be made until the completion of the first year for which such measurements are required (*U.S. v. DTE*, pgs. 8 and 9) [emphasis in original]

And:

Further, Defendants argue that their Notice Letter contained all of the required information, as it describes the projects; identified the emissions unit that would be affected by the projects; provided their calculations of baseline and actual emissions, projected annual emissions and the amount of any increase in emissions over baseline levels that could be excluded as unrelated to the projects; and explained why Detroit Edison was excluding emission based on market demand and other factors unrelated to the project In addition, Defendants' Notice Letter provided a table with all relevant calculations. (*U.S. v. DTE*, pgs. 11 and 12)

The District Court found Detroit Edison's outage notification sufficient in both its timing – "While the Court finds such timing to be minimally sufficient, Plaintiff cites no authority suggesting that notice must be given further in advance of the project's commencement date" (*U.S. v. DTE*, pg. 10) – and content:

While the explanation of the emissions of the emissions exclusion in the Notice Letter is not very specific, and the accompanying table shows the results of the calculations without their back-up data, Plaintiff does not point to any provision in Michigan's rules requiring specificity beyond that which was provided, and the Court has not found such provision on its own accord. (*U.S. v. DTE*, pg. 11)

The District Court found in favor of Detroit Edison and concluded that the initial notification letter submitted for the Detroit Edison Monroe outage met all pre-construction notice obligations under the NSR regulations.

AQD finds no substantive distinction between the timing and content of the initial notification letter at issue in the *U.S. v. DTE* case and the initial notification letter submitted for the September 2005 outage at Detroit Edison River Rouge Unit 3; in fact, the Plaintiff noted in the case “the language in Defendant’s Notice Letter contains boilerplate language from prior outage notifications at other power plants” (*U.S. v. DTE*, pg. 10). The commenter’s complaints concerning the Unit 3 initial notification letter mirror those raised by the Plaintiff, and dismissed by the District Court, in the *U.S. v. DTE* case. Therefore, the AQD disagrees with the commenter’s contention that the initial Unit 3 outage notice was deficient because it lacked specificity for the excluded emissions claimed by Detroit Edison. AQD’s review of the Unit 3 outage notification found the information provided by Detroit Edison met the minimal requirements of the NSR regulations and as a consequence of *U.S. v. DTE* the AQD finds no cause to reverse this conclusion.

Commenter’s second contention is that the projected emissions increases for calendar year 2006 at Unit 3 are not due to demand growth:

For example, in the exact same month that Detroit Edison submitted the Unit 3 Planned Outage Notification, the company made a filing with the Michigan PSC in which it projected that its annual electric sales, system output, and coincident peak demand would be lower in 2006 than averaged for 2001 and 2002. In particular, Detroit Edison’s electric sales in 2001 and 2002 averaged 50,421.5 million kWh per year and were projected to be only 48,401 million kWh in 2006.⁶⁶ The company’s system output averaged 54,094 million kWh per year in 2001 and 2002, and was projected to be only 52,062 million kWh per year in 2006.⁶⁷ And peak demand for Detroit Edison averaged 11,550.5 million kWh per year in 2001 and 2002, and was projected to be 11,400 million kWh in 2006.⁶⁸ These projections undermine Detroit Edison’s concurrent, unsupported claim that projected emissions increases at Unit 3 are somehow due to demand growth. (Letter, pg. 26; with citations in original)

The commenter implies that if Detroit Edison had divulged this information to the AQD within the Unit 3 outage notification, or if AQD had sought the information on its own initiative, the AQD would have attributed the SO₂ and NO_x emissions increases projected for calendar year 2006 to the September 2005 outage, classified the project an NSR major modification, and required Detroit Edison to obtain an NSR permit (or sought relief through an enforcement action if Detroit Edison did not obtain an NSR permit).

The AQD finds the data fails to justify the commenter’s point of view because the commenter’s initial premise is too narrow to support the commenter’s ultimate conclusion. The figures quoted within the comment represent electric sales, system output, and peak demand for Detroit Edison’s entire electricity generating fleet. The commenter observes a decrease in system-wide sales, output, and peak demand from 2001-2002 to 2006, and ascribes the same to River Rouge Unit 3. However, Detroit Edison does not attribute the projected emissions increases solely to system-wide demand growth in the outage notification:

At some point in the future, baseline levels may be exceeded again, but not as a result of this outage. Future unit utilization is also a function of expected electricity market conditions. Many factors influence market demand – weather, availability of other units, transmission limitations, electrical system security, etc. Moreover, fuel quality could change. (Exhibit 4, pg. 2)

Here, the terms “market conditions” and “market demand” refer to the demand upon River Rouge Unit 3 itself because factors such as the “availability of other units” and “transmission limitations” are as applicable, or more so, on the unit-level or plant-level as they are on Detroit Edison’s system as a whole. Numerous scenarios exist whereby the system output for the fleet may decrease even as the output of (i.e. demand for) any one unit, such as Unit 3, increases – such as an extended interruption in the operation of one or more units within the fleet.

The commenter neglects to explain the lockstep connection between Detroit Edison's system-wide output and the output at Unit 3 which allows the comment to draw a conclusion that a decrease in the system-wide demand inevitably results in the same for River Rouge Unit 3. In failing to find any factual basis for the claim within the comment, the AQD is left to speculate the commenter either accepts, as an article of faith, that every individual unit within the fleet must mimic the overall system or regards, for some reason, River Rouge Unit 3 to be the bellwether for the entire fleet. The AQD does not find evidence for either. If the output demand on every individual unit in the fleet mirrored the demand on Detroit Edison's overall system, then logic commands the relative output between all the individual units within the fleet be fixed, and, unsurprisingly, the comment itself reveals this is not the case even among the two units at River Rouge: in 2007 Unit 2 produced more MWh than Unit 3, and in 2008 Unit 3 more than Unit 2. (Letter, pgs. 25 and 28) And with a capacity of approximately 280 MW, Unit 3 is not large enough to act as a lodestar for the system. (Exhibit 4, pg. 5) At full utilization for an entire year Unit 3 would contribute less than 5% to the 52,062 million kWh system output for 2006 quoted by the commenter. Multiple emissions units within the Detroit Edison fleet are vastly larger than River Rouge Unit 3 and contribute far more to the system-wide total (for example, each of the four units at Detroit Edison Monroe is nearly three times the capacity of River Rouge Unit 3). The system wide data quoted by the commenter is not shown to be relevant to the demand for, operations of, and emissions from River Rouge Unit 3. Therefore, even an acceptance of the commenter's premise, i.e. that the emissions increases at Unit 3 are not due to system-wide demand growth, does not defeat Detroit Edison's claim that the emissions increases are unrelated to the project.

In summary, the AQD received and reviewed Detroit Edison's outage notification report for the September 2005 outage at River Rouge Unit 3. Detroit Edison's projected emissions for SO₂ and NO_x exceed baseline emissions by 251 tons and 102 tons, respectively. Detroit Edison asserted the increases were due to factors unrelated to the project and therefore classified the emissions as excluded under 40 CFR 52.21(b)(41)(ii)(c). Detroit Edison thereby reported the difference between projected actual emissions and baseline actual emissions to be zero for these pollutants and concluded an NSR major modification would not result from the project. Lacking evidence to dispute the claim, AQD accepted Detroit Edison's position and for the purpose of the pre-construction review concluded an NSR permit was not required. The commenter contends Detroit Edison did not provide sufficient information within the outage report to support its determination and alleges system wide utilization and sales information provided concurrently to the Michigan PSC undermines Detroit Edison's claim. As a result, the commenter concludes an NSR violation occurred at Unit 3 during the September 2005 project.

AQD disagrees with the comment. In AQD's view, *U.S. v. DTE* (E.D. Mich. Aug. 23, 2011) confirms the adequacy of Detroit Edison's outage notice for Unit 3. AQD does not find the system wide data provided within the comment dispositive for an NSR analysis specific to Detroit Edison River Rouge Unit 3. Consequently, AQD does not identify information within the comment to cause AQD to alter the agency's pre-project NSR analysis or reverse the agency's pre-project determination. The AQD accepts Detroit Edison's pre-project assessment that an NSR permit was not required for the September 2005 project at River Rouge Unit 3.

Post-Project NSR Analyses for Units 2 and 3

The commenter reviews the post-project annual NSR emissions reports submitted by Detroit Edison and finds the facility in violation of the NSR regulations at both Unit 2 and Unit 3; the AQD disagrees. The divergence results, in part, from dissimilar evaluations of the baseline time periods chosen by Detroit Edison.

The commenter's NSR analyses utilize baseline periods established by Detroit Edison in the corrected Unit 2 outage notice of 1/9/2007 and in the Unit 3 outage notice of 9/9/2005. For Unit 2 the commenter notes SO₂ emissions reported for calendar year 2009 (7,481 tons) exceed the baseline (7,318 tons) by greater than the 40 ton NSR significant emission threshold for SO₂. Similarly, for Unit 3 the commenter notes SO₂ emissions reported for calendar year 2008 (7,854 tons) exceed the baseline (7,598 tons) by greater than 40 tons. And, for Unit 3 the commenter notes NO_x emissions reported in calendar years

2007 (3,276 tons) and 2008 (3,319 tons) each exceed the baseline (3,076 tons) by greater than the 40 ton NSR significant emission threshold for NO_x. The commenter argues these emissions increases would not have been observed at Units 2 and 3 but for the physical changes undertaken during their respective outages of March 2006 and September 2005. Because the emissions increases exceed the significance thresholds for SO₂ and NO_x, the commenter asserts the AQD must conclude NSR major modifications occurred during those projects and find Detroit Edison River Rouge in violation of NSR for failing to obtain the requisite preconstruction permits. (Letter, pgs. 24 through 29)

In support, the commenter contends that these projects, among others, “were carried out or planned pursuant to one of Detroit Edison’s two primary programs for making capital expenditures on its coal-fired power plants”, that “Detroit Edison’s PSC filings make clear that life extension [of the EUSGUs] is exactly what the company was aiming for [by implementing these projects]” and that “Detroit Edison has made clear that a number of the capital projects carried out at the River Rouge Coal Plant were due to the fact that components were reaching their end of life and creating reliability concerns.” (Letter, pg. 5) Moreover, “Detroit Edison’s PSC filings also provide strong evidence that the capital expenditures identified above were successful in increasing the availability and reducing the forced outages at the River Rouge Coal Plant” because the “overall availability of the River Rouge Coal Plant increased significantly during the time when these capital expenditures were being made” and “Detroit Edison projected and experienced reductions in the Random Outage Rate (‘ROR’), which is the percentage of generation lost through derated operation and non-periodic outages at its coal-fired facilities due to its capital expenditures.” (Letter, pg. 6) Further, for Unit 3 the commenter again compares trends in Detroit Edison’s system wide sales figures to trends in the utilization of Unit 3. (Letter, pg. 27) The apparent purpose of this presentation is two-fold: first, to argue against RMRR (which is addressed by the AQD in the section above on RMRR); second, to infer that any emissions increases observed post-project could not have been accommodated by Unit 2 or Unit 3 absent the project, and thus the emissions increases are not excluded under 40 CFR 52.21(b)(41)(ii)(c).

The commenter further contends that “SO₂ emissions at Unit 2 were lower in 2008 only because Detroit Edison burned coal with a lower sulfur content in those years than in 2004 and 2005.⁸⁴ As such, 2004 and 2005 would count as a representative baseline for determining whether the modification led to an increase in SO₂ emissions at Unit 2 only if the same sulfur content is assumed for the coal.” (Letter, pg. 28; with citations in original) The same claim is made for Unit 3: “SO₂ emissions from Unit 3 were lower in 2006,⁶⁹ 2007,⁷⁰ and 2009⁷¹ only because Detroit Edison burned coal with a lower sulfur content in those years than in 2001 and 2002.” (Letter, pg. 26; with citations in original)

The commenter concludes “Detroit Edison’s submissions fail to demonstrate that the modifications carried out at Unit 2 of the River Rouge Coal Plant in 2006 did not lead to an emissions increase that should have triggered PSD and NNSR requirements.” (Letter, pg. 28) And “Detroit Edison’s claims that increased utilization and emissions from Unit 3 are due to demand growth are unsupported and the evidence strongly supports a conclusion that such increases are actually attributable to the modifications that Detroit Edison undertook at Unit 3.” (Letter, pg. 27)

AQD disagrees with the comment and does not find an NSR violation in the annual emissions data supplied by Detroit Edison River Rouge. The commenter ignores Detroit Edison’s approach in determining NSR applicability for Unit 2 and Unit 3 with the result that the comment fails to address the central premise of Detroit Edison’s method. Detroit Edison’s post-project NSR annual reports do not rely upon RMRR or excluded emissions in analyzing whether or not a significant emissions increase obtains for either Unit 2 or Unit 3. Detroit Edison’s post-project NSR analysis relies on amending the selected baselines for the SO₂, NO_x, and PM after the conclusion of the project to accommodate post-project actual emissions. In reviewing Detroit Edison’s NSR reports, AQD has accepted the amended baselines provided the time periods selected have fallen within the required “2-in-5” window. The commenter neglects to consider this practice as a suitable means to evaluate post-project NSR applicability. Consequently, while the commenter promotes a method for evaluating NSR applicability (a method that concludes with NSR violations), the commenter is unsuccessful in discrediting the alternative method

promoted by Detroit Edison (a method that concludes with NSR compliance), and therefore does not present convincing evidence that NSR violations exist at Units 2 and 3 as a result of these outages.

As shown above in the “Unit Emissions Data from NSR Reports” table, baseline periods for Units 2 and 3 are available to Detroit Edison River Rouge and chosen by Detroit Edison which, with addition of the 40 ton NSR significant emission rate for NO_x and SO₂, and addition of the 25 ton NSR significant emission rate for PM, establish NSR major modification thresholds greater than the projected and reported emissions of SO₂, NO_x, and PM. The reported NO_x emissions for calendar year 2008 at Unit 3 (3,319 tons) are the only projected or reported emissions to exceed the respective baseline (3,284 tons); the increase is 35 tons, 5 tons less than the level (3,324 tons) necessary to trigger a significant emissions increase. As a result, unlike the commenter, Detroit Edison does not report a significant emissions increase in any of the post-project annual reports for Unit 2 and Unit 3. Thus, there is no need to consider excluded emissions in the analysis and Detroit Edison does not claim SO₂, NO_x, or PM emissions for exclusion under 40 CFR 52.21(b)(41)(ii)(c) in any of the post-project annual NSR reports.

AQD can only arrive at the commenter’s conclusion if Detroit Edison River Rouge were either prohibited from altering the baseline period after the commencement of the project or prohibited from choosing a different baseline period for each pollutant. The NSR definition for baseline actual emissions states “[a] different consecutive 24-month period can be used for each regulated NSR pollutant.” (40 CFR 52.21(b)(48)(i)(c)) And AQD finds no language in the NSR regulations prohibiting the revision of baseline actual emissions after commencement of a project.

As indicated in the NSR overview, the methodology for determining NSR applicability at 40 CFR 52.21(a)(2)(iv)(b) contains the elements of a prospective analysis and a retrospective analysis. For the pre-project analysis, the NSR regulation refers to the paragraphs containing the various applicability tests: “[t]he procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section . . .” Post-project, the NSR regulations are less specific by declaring only that “[r]egardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.” The definitions of “significant emissions increase”, “significant”, and “net emissions increase” fail to clarify and track back to the definition of “baseline actual emissions” at 40 CFR 52.21(b)(48), which only stipulates the numeric value must be the average rate “at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project.” The definitions do not dictate that a baseline period must remain immutable once selected, only that a baseline period, whenever selected, must be drawn from the 5-year period preceding construction.

A baseline period chosen for a pre-project NSR analysis cannot be subsequently altered in the post-project annual NSR reports *for the pre-project analysis* solely because this particular analysis, *being pre-project in its entirety*, must close prior to the commencement of the project; the immutability of “baseline actual emissions” within a pre-project analysis is a function of the timing of the analysis itself and not a quality generally attributable to “baseline actual emissions.” The case to attach this quality of permanence to the baseline period, generally, and therefore equate the pre-project baseline to the post-project baseline is neither supported by the definition of “baseline actual emissions” nor sustained elsewhere within the NSR regulations.

In asserting NSR violations in the face of Detroit Edison’s analysis, the commenter assumes an obligation to show that the NSR regulations invalidate Detroit Edison’s methodology. Detroit Edison’s NSR methodology and conclusions are public and known to the commenter. The commenter notes:

On June 18, 2010, NRDC submitted a Freedom of Information Act (“FOIA”) request to MDNRE seeking planned outage notifications and outage reports for outages at Units 2 or 3 of the River

Rouge Coal Plant in 2005, 2006, 2007, 2008, and 2009.⁵⁷ On August 16, NRDC received in response planned outage notifications and post-outage emissions reports that Detroit Edison had submitted for the 2005 outage at Unit 3 and the 2006 outage at Unit 2. (Letter, pg. 24; with citations in original)

The commenter asked for and received the AQD's agency reports reviewing the NSR submittals, as evidenced by commenter's inclusion of selected reports as exhibits for the comment (e.g. Exhibits 2, 3, 29, and 31). Detroit Edison's NSR reports and AQD's agency reports clearly describe Detroit Edison's baseline revisions, AQD's deliberation of the revisions, and AQD's acceptance of the revisions (excepting one as described above in the summary of the NSR reports). The commenter was fully aware of Detroit Edison's reasoning and AQD's review of Detroit Edison's reasoning while constructing the comments for the Letter. Yet, notably, the commenter does not raise objection to Detroit Edison's approach in amending the baseline and thus provides no argument to reject Detroit Edison's position, namely, that an NSR modification has not taken place because baseline emissions have not been exceeded by a significant amount in the years following each respective project. The commenter simply presents an analysis based on one of 60 potential baselines and concludes NSR violations exist. The commenter fails to describe why Detroit Edison's analysis, based on another of 60 potential baselines and concluding NSR violations do not exist, is unsustainable. Thus, in AQD's view, the commenter presents Detroit Edison's actual emissions data and states NSR violations exist without adequately demonstrating NSR violations exist.

The AQD can only rationalize the commenter's silence by presuming the commenter considers Detroit Edison's methodology to be so antithetical to the NSR regulations that it may be dismissed out of hand. However, in assessing the two methods the AQD finds Detroit Edison's approach consistent with, and the commenter's approach inconsistent with, the guiding tenet of NSR applicability. AQD notes the "Applicability procedures" to the PSD rules contain the following at 40 CFR 52.21(a)(2)(iv)(a):

(iv) The requirements of the [PSD] program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(a) through (f) of this section.

(a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

To reiterate, the controlling principle of NSR applicability is that the activity under review must, first, *cause* a significant emissions increase and must, second, *result* in a net emissions increase. In the commenter's post-project NSR analysis, Units 2 and 3 are adjudged to have caused a significant emissions increase of NO_x and/or SO₂ simply because the facility, for whatever reason, failed to choose the highest permissible baseline in the pre-outage analysis. To elect the commenter's NSR post-project analysis and reject Detroit Edison's NSR post-project analysis is to reduce NSR's "causation" principle to nothing more than an accounting blunder. Thus, notwithstanding a reduction in measured actual emissions, a facility's NSR fate post-project might turn on a pre-project oversight wherein the facility mistakenly chooses the *n*th highest baseline period instead of the maximum baseline available. The NSR program was enacted for the purpose of achieving and maintaining compliance with the NAAQS. To find credence in the commenter's approach is to read a threat to the NAAQS from a bookkeeping lapse even in the face of evidence that actual emissions in the post-project period have declined from the emissions levels in the pre-project period.

Furthermore, a facility's desire to amend the baseline after the project need not necessarily result from an error, but rather the consequence of an early pre-project NSR notice. The beginning and end of the 5-year baseline window are established by the commencement of the activity and not by the postmark date of the NSR notice. Nonetheless, as a practical matter the submission date of the initial NSR notification condenses the baseline window for the pre-project analysis, as the actual emissions data for the 24-month time periods that conclude after the submission of the initial NSR report yet prior to the start of the activity are, obviously, not available when the evaluation is completed. As a result, the earlier a facility submits an NSR analysis the fewer potential baselines are available to the facility for the pre-project review, which, of course, is of no consequence provided but one baseline period is identified with emissions in excess of the maximum projected actual emissions: should one or more of the forgone baselines later be found with emissions to exceed the chosen baseline, the result of the pre-project analysis remains unchanged. In the event the maximum post-project actual emissions ultimately exceed the chosen baseline and yet fall beneath one or more baselines forgone during the pre-project review, it would seem perfectly reasonable for the facility to choose one of the forgone baselines (and thus amend the baseline) for the post-project review. The AQD finds nothing nefarious or irregular in this practice, as these baselines would have been available to the facility but for the early pre-project submission. To deny the facility the change is to mock NSR's principle of causation, for in this case the facility's early pre-project submittal has unwittingly produced an NSR major modification in abstract where none would otherwise exist. The commenter protests, as the Plaintiff protests in *U.S. v. DTE*, of the short notice given to the reviewing agency for these NSR projects: "[t]he [Unit 3 Outage] Letter . . . was received by MDNRE only three days before the outage began." (Letter, pg. 3) Under the circumstances, the AQD can only wonder at the origin of the commenter's objection; that is, it would benefit a facility nothing to submit the pre-project analysis until after the last potential baseline period is ended.

The AQD views such outcomes as incompatible with the principle that the project must be deemed to have caused a significant emissions increase to be considered a major modification under the NSR regulations. The AQD accepts the Detroit Edison's practice of altering a pollutant's NSR baseline for the post-project analysis, provided the chosen baseline is otherwise an allowed baseline under NSR. The AQD does not find commenter's approach consistent with the precept that a major NSR project must be shown, either by prediction beforehand or by measured emissions afterwards, to *actually cause* a significant emissions increase.

Finally, and most critically for the review of this comment, the AQD notes the commenter adopts the same (i.e. Detroit Edison's) methodology when suited for the commenter's own purpose; doing so undermines the commenter's own argument and effectually nullifies the commenter's assertion that NSR violations are to be found at Units 2 and 3 in the annual emissions data submitted by Detroit Edison River Rouge.

As indicated above, Detroit Edison submitted an initial notification for the Unit 2 outage on 3/15/2006 and, subsequently, a corrected outage notification on 1/9/2007. In the corrected notification, Detroit Edison states: "In reviewing Unit 2 operations at the end of 2006, we discovered that the baseline years in the original notification of March 15, 2006 were incorrectly selected as 2002-2003. The baseline years should have been reported as 2004-2005." (Exhibit 33, pg. 1) In addition, Detroit Edison updates the projected actual emissions for 2007 in this notification.

Significantly, the commenter utilizes the baseline and projected actual emissions identified in the corrected outage notice of 1/9/2007 for the commenter's own Unit 2 NSR analysis. The commenter does so while cognizant the 2006 project at Unit 2 was completed prior to the end of the calendar year, because the commenter is in possession of Detroit Edison's post-project NSR emissions report for calendar year 2006 at Unit 2, wherein Detroit Edison states: "[b]ased on the emissions for the year 2006, there has been no increase in emissions as a result of activities during the 2006 periodic outage." (Exhibit 34, pg. 1) The commenter is thus aware that Detroit Edison's transition to a baseline period of 2004-2005 occurs after the project commenced, after the project was completed, and after Unit 2 resumed normal operation. The commenter nevertheless adopts both the revised baseline and the

revised projected actual emissions for the comment, yet, when Detroit Edison later revises again the baseline for Unit 2 and also revises the baseline for Unit 3 the commenter inexplicably ignores the revisions. In the context of the NSR regulations there is no difference between a revised baseline in the corrected outage report and a revised baseline in an NSR annual report; the effect is the same: the baseline period is amended after the commencement of the project. The commenter's baseline choices for the Unit 2 analysis give tacit approval, at the least, to the later Unit 2 and Unit 3 amendments sought by Detroit Edison because, having utilized an amended baseline within the comment, the commenter cannot logically subscribe to a theory of an immutable baseline. Having employed a modified baseline within the comment, the commenter is compelled to distinguish the commenter's choice from Detroit Edison's choices: to clearly explain why the commenter's chosen baseline for Unit 2, modified after the Unit 2 project commenced, is permitted under the NSR regulations while Detroit Edison's chosen baselines for Unit 2 and Unit 3, also modified after the commencement of the respective projects, are not permitted under the NSR regulations. The comment lacks such an illustration. Without it, the AQD can only consider the commenter's baselines to be arbitrary choices; consequently, the AQD must consider the commenter's conclusions, derived from those baselines, unsound.

For the reasons above, AQD finds no cause in the comment to reject Detroit Edison's altered SO₂, NO_x, and PM baselines. AQD finds commenter's NSR analyses to be incomplete and inconsistent, and does not accept the commenter's declarations of NSR violations at Unit 2 and Unit 3.

AQD also disagrees with the commenter's assertion that SO₂ emissions within the selected baseline periods must be adjusted to accommodate the decrease in the sulfur content of the coal utilized in the post-outage period. The definition of "actual emissions" in the NSR regulations specifies a calculation "using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the select time period." (40 CFR 52.21(b)(21)(ii)) "Baseline actual emissions" for an EUSGU speaks to a refinement only in cases of non-compliant emissions (e.g. 40 CFR 52.21(b)(48)(i)(b)): "The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period." The AQD notes "baseline actual emissions" for a non-EUSGU contains the same language and also provides for an adjustment related to current applicable requirements that did not obtain during the baseline period (e.g. 40 CFR 52.21(b)(48)(ii)(c)): "The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. . . ." EPA explains this language for non-EUSGUs at 67 FR 80194: "This [the baseline] rate must be adjusted downward to reflect any legally enforceable emission limitations imposed after the selected baseline period."

Unit 2 and Unit 3 are each restricted to 1.67 pounds per million Btu heat input (based on a sulfur content of 1.0% by weight and a heat content of 12,000 Btu per pound), averaged daily. Unit 2 and Unit 3 are restricted to not more than 43.2 tons SO₂ per calendar day and 50.5 tons SO₂ per calendar day, respectively. These emission limits are based on Administrative Rule 401(1), the Michigan State Implementation Plan, and the National Ambient Air Quality Standards (40 CFR 52.21(d)). The restrictions are in the current ROP (Conditions II.2.1 and II.2.2 of Tables E-1.3 and E-1.4) and found in enforceable permits/orders issued to the facility as far back as 1988. The SO₂ mass per heat input values reported by Detroit Edison River Rouge in the NSR emission reports do not exceed 1.67 pounds per million Btu heat input, and the annual SO₂ emissions do not exceed the annualized calendar day limits of 15,768 tons for Unit 2 or 18,433 tons for Unit 3. Therefore, neither 40 CFR 52.21(b)(48)(i)(b) nor 40 CFR 52.21(b)(48)(ii)(c) [were it applicable to EUSGUs] provide cause to adjust the SO₂ baseline downward.

Thus, in reviewing the information in the outage and NSR emission reports, AQD does not find a significant emissions increase of SO₂, NO_x, or PM as a result of projects conducted by Detroit Edison

River Rouge in either the September 2005 outage at Unit 3 or the March 2006 outage at Unit 2, therefore, AQD does not agree with the conclusions presented in the comment.

Additional Activities at Unit 2 and Unit 3

In addition to the outages beginning in 9/2005 at Unit 3 and beginning in 3/2006 at Unit 2, the commenter names five projects that should have triggered major NSR permitting, as follows:

- (i) "\$8.4 million boiler tube replacement on Unit 2 at some point between 1994-2002";
- (ii) "\$8.3 million for radiant superheater, reheater and bull nose tube replacements, \$1.5 million for turbine blade replacements, and \$1.5 million to retube the condenser on Unit 3 in 2004";
- (iii) "\$2 million boiler tube replacement on Unit 2 in 2005";
- (iv) "\$5 million project to replace water wall tube sections for Unit 3 being developed for the 2008 to 2011 time period";
- (v) "In a June 2009 PSC Filing, Detroit Edison reported that over the next year it was planning to spend \$2.7 million for radiant superheater tubes on Unit 3, and that it was also retubing the main unit condenser at Unit 3."

The commenter identifies the activities in items (i) through (iii) from a PSC filing of 6/2003, in item (iv) from a PSC filing of 6/2006, and in item (v) from a PSC filing of 1/2009 (the commenter cites 6/2009, but AQD, in viewing the document, believes 1/2009 to be the correct date); therefore, the activities in item (i) is based on retrospective testimony and the remainder are based on testimony that is prospective (and thus the timing and nature of the activities may alter from the date of the testimony to the date of the project). The commenter concludes "[e]ach of these projects constitutes a significant capital investment to replace major components of Units 2 and 3 of the River Rouge Coal Plant, which should have triggered major source PSD or NNSR permitting at the Plant." (Letter, pg. 4)

The commenter further commands:

Based on MDNRE's response to NRDC's FOIA, it appears Detroit Edison has not submitted planned outage notifications or post-outage emissions reports to MDNRE for any of the other modifications that the company has undertaken at Units 2 and 3 of the River Rouge Coal Plant. If Detroit Edison has submitted such notifications and reports, MDNRE must objectively and independently evaluate those reports to verify the accuracy of the information contained therein, and make the reports available for public review and comment as part of this proceeding. Assuming Detroit Edison did not submit such reports, MDNRE must evaluate the physical changes identified in these comments, and any other physical changes that Detroit Edison has undertaken at the River Rouge Coal Plant, pursuant to the actual-to-potential test, and subject such evaluation to public review and comment. (Letter, pg. 28)

The activity in item (i) occurred during an outage of 3/2001 through 5/2001 when low-NO_x burners were installed at Unit 2 (for which the facility received Permit to Install No. 258-00, issued on 4/17/2001 by the AQD). Dating after 1992 and prior to 2003, this activity falls under the WEPCO rule for EUSGUs. Under WEPCO, EPA stipulates the following ("July 21, 1992 Text File of the WEPCO Final Rulemaking promulgated in the Federal Register" as provided on the EPA website, New Source Review (NSR) Archives, at eighth and ninth paragraphs of III.B.5; hereafter WEPCO Text File):

Where the change does not increase the unit's emissions factor, i.e., the amount of pollution emitted by a source after control per unit of fuel combusted (such as pounds of SO₂ emitted per ton of coal burned), the utility may submit annual utilization data, rather than emissions data, as a method of tracking post-change emissions. If annual utilization data show that the unit increased

utilization above baseline levels, the permitting authority should determine whether the increase resulted from the change. Where a causal link exists between the change and the increase in utilization, the permitting authority should then determine whether emissions have also increased as a result of the change.

Changes that could increase a unit's emissions factor typically involve changes to the boiler itself. (Such changes do not include activities that qualify as pollution control projects under today's rule.) Where these types of changes exist, the utility should submit annual emissions data to the permitting authority. If these data suggests that the utility has increased annual emissions over baseline levels, the permitting authority should inquire whether the increase resulted from the physical or operational change. The utility may demonstrate that any increase was caused by an independent factor, such as demand growth.

AQD reviewed emissions and utilization data submitted by Detroit Edison River Rouge to CAMD, summarized below with the potential baseline and maximum post-outage figures in bold.

Unit 2 Emissions Data from EPA's CAMD Website (in tons)

Time Period	SO ₂ (tons)	NO _x (tons)	Heat Input (million Btu)
7/1997 through 6/1999 (available baseline)	9,577.4	3,369.2	18,794,438
1998 calendar year	9,394.0	3,405.8	19,523,031
1999 calendar year	9,191.5	2,913.6	17,062,996
2000 calendar year	5,938.5	2,572.9	12,804,877
2001 calendar year	4,372.5	1,529.4	9,345,293
2002 calendar year	8,502.8	2,397.9	18,528,487
2003 calendar year	8,157.7	2,235.6	15,109,968
2004 calendar year	7,697.9	2,434.7	17,182,775
2005 calendar year	6,937.6	1,893.9	15,915,215
2006 calendar year	5,730.0	1,429.7	13,223,280

The heat input for each of the calendar years following the outage is less than within the potential 24-month baseline extending from July of 1997 through June of 1999, thus, the utilization data does not reveal a significant emissions increase. Under WEPCO, EPA suggests this analysis alone suffices, unless the project is known to be responsible for an increase in a pollutant's emission factor. SO₂ and NO_x emissions following the project are less than within the baseline period, confirming the conclusion drawn from the heat input data; in fact, the 1998 and 1999 calendar year data alone construct a baseline that accommodates the post-outage annual emissions. The installation of low-NO_x burners is a change to the boiler likely to cause an increase in the rate of CO emissions, but such a change is excluded from classification as a "major modification" under the provisions of 40 CFR 52.21(b)(2)(i)(h), in effect at the time, exempting "[t]he addition, replacement, or use of a pollution control project at an existing utility steam generating unit" Therefore, the AQD concludes the available information does not reveal an NSR violation associated with the activities conducted during the March 2001 outage at Unit 2.

The activities in items (ii) and (iii) anticipate the September 2005 Unit 3 and the March 2006 Unit 2 outages, therefore, the AQD considers the analysis above on these projects sufficient to address these two items.

The activity in item (iv), the proposed project for the 2008 to 2011 time period to replace waterwall tube sections in Unit 3, is identified in a 6/1/2006 filing with the PSC. (Exhibit 6, pg. GNH-25) However, the commenter also presents a later PSC filing of 1/26/2009 covering projects completed or proposed for time periods beginning July 2007 through June 2010; ten specific projects involving boiler waterwalls are identified, yet River Rouge Unit 3 is not among them. (Exhibit 12, pgs. PF-19, PF-22, and PF-26) The AQD will not further pursue an NSR analysis for this activity because the comment does not contain evidence this project passed beyond a speculative stage.

Regarding item (v), Detroit Edison River Rouge commenced a planned outage at Unit 3 on or about October 29, 2010 to retube the main condenser, rewind the LP generator rotor and the HP stator, and upgrade the electrical system. Unit 3 recommenced operation in February 2011, the most substantial outage by duration since September 2005. An outage notification dated 10/25/2010 from Detroit Edison River Rouge was received by AQD via email on 10/27/2010. Detroit Edison River Rouge projects maximum annual emissions for SO₂ (7,238 tons), NO_x (3,005 tons), and PM (131 tons) to occur during calendar year 2013; the maximum projected actual emissions are less than each of the respective baselines chosen by Detroit Edison (and, as an aside, are less than the former baselines established during the September 2005 outage). Therefore, AQD does not find evidence of an NSR violation in the October 29, 2010 NSR report.

In addition to the specific projects identified above, the commenter would have AQD investigate all physical changes at the plant and submit the analyses for public comment prior to issuance of this ROP. As the commenter places no boundaries on this request, AQD must presume the comment to encompass each physical change at the facility from the inception of the NSR regulations to the present day. The number of physical changes at a plant of any notable size over the course of three decades will number in the dozens, if not hundreds, considering the commenter's limited acceptance of RMRR. Such an undertaking is not viable, either within the ROP process or without, and far exceeds the scope of review EPA envisioned for the implementation of the NSR regulations.

According to EPA, "State and local air agencies generally opposed the future actual method of calculating post-change emissions. . . ." proposed for the original WEPCO rule. (WEPCO Text File at fourth paragraph of III.B.3) Then, having worked within the WEPCO framework, several State and local air agencies testified to the burden of NSR investigations during their review of the (then proposed) 2002 NSR reforms based on the WEPCO methods: "[s]everal commenters . . . objected to the actual-to-future-actual methodology because they viewed it as needlessly complex and likely to create burdens on the reviewing authority." ("Technical Support Document for the Prevention of Significant Deterioration and Nonattainment Area New Source Review Regulations" of November 2002, hereafter TSD, pg. I-4-16)

EPA adopted the opposite view and in assessing the impact of the 2002 NSR reforms on State, local, and tribal governments under Title II of the Unfunded Mandates Reform Act of 1995 concluded the "NSR revisions will ultimately provide greater operational flexibility to sources permitted by the States, which will in turn reduce the overall burden of the program on State and local authorities by reducing the number of required permit modifications." (67 FR 80242) As the burden decreases only if the number of reviews under the actual-to-future-actual methodology is fewer than the number of reviews (i.e. permit modifications) under the actual-to-potential methodology, AQD must conclude EPA did not, and does not, intend for reviewing agencies to be anchored with the obligation to review each and every physical change at a major stationary source for NSR compliance.

Rather, EPA asserts the tracking procedures incorporated into the 2002 NSR reforms serve to filter the meaningful from the inconsequential and thus ensure the necessary compliance reviews will take place:

We [EPA] disagree that the actual-to-projected-actual test will make it more difficult to accurately identify those changes at a unit that will result in actual emissions increases. . . . the 5-year tracking provision in the final rule will assure that any subsequent emissions increase that exceeds the projected level (insofar as it represents a significant emissions increase) must be reported to the reviewing agency and then appropriate review will take place. . . . We agree with the commenters [to the proposed 2002 NSR reforms] who believe retrospective NSR applicability determinations would be problematic. It is our intent under the new rules that the need for such retroactive determinations would be minimal. The main purpose of the annual tracking requirements is to maintain adequate information to ascertain whether the source's initial estimate of post-change actual emissions is accurate, but such a tracking requirement should also promote careful and accurate projections so that sources will not have to face the risk of retroactive NSR applicability and possible enforcement actions. The new rules also contain procedures enabling

the reviewing authority to review a source's post-change operating records and institute further action as necessary if either the resulting post-change annual emissions increase or the emissions projection is significant. (TSD, pgs. I-4-17 and I-4-18) [format as in original]

Thus, the foundation of NSR compliance is grounded within the annual tracking and reporting of emissions affected facilities provide to the reviewing agency. The AQD has duly reviewed the NSR reports provided by Detroit Edison River Rouge, as detailed above. The reviewing agency may, as the AQD has here at the commenter's order, review selected projects for NSR compliance without previously having received NSR reports for those activities. But, the AQD disagrees with the comment that each and every physical change must be investigated for NSR applicability, and the results provided for public review, before the AQD may proceed with the issuance of the ROP.

Finally, the commenter argues any NSR analysis conducted by the facility or under review by the AQD must default to the actual-to-potential test where either projected actual emissions were not submitted to the AQD prior to the project or post-outage annual emissions were not submitted to the AQD after the outage was completed. As the NSR regulations provide only two options for NSR applicability, the actual-to-projected-actual test and the actual-to-potential test, the commenter reasons that any failure of the facility to abide by the recordkeeping and reporting provisions of the actual-to-projected-actual test revokes the privilege of further utilizing the test for that project, leaving only the actual-to-potential test for use. The AQD has received outage notifications and NSR reports only for the 9/2005 outage at Unit 3, the 3/2006 outage at Unit 2, and the 10/2010 outage at Unit 3. Having never received an outage notification or post-outage reports for the 3/2001 activities at Unit 2, for example, the commenter therefore argues AQD's analysis above for this project must only employ the actual-to-potential test, and thus so for every physical change conducted absent the submission of NSR reports.

The AQD agrees with the commenter upon the principle that projects must be subjected to the actual-to-potential test in cases where the facility does not adhere to the requisite NSR reporting provisions attending the actual-to-future-actual tests. However, the AQD finds the commenter's leap to the actual-to-potential test in all cases where NSR reports are lacking to be misguided.

WEPCO stipulated an EUSGU, when utilizing the actual-to-future-actual test, must submit annually information to demonstrate the physical or operational change did not result in an emissions increase. A preliminary report was not required and EPA left the manner, schedule, and form of the post-project information submission unspecified. For cases, such as the 3/2001 project at Unit 2, where emissions reports to a State's annual emissions inventory and/or to the EPA's CAMD are sufficient to demonstrate a significant net emissions increase has not occurred, the facility may reasonably conclude WEPCO's reporting obligations met. The NSR reforms of 2002 require an initial NSR report only for those projects that exhibit a "reasonable possibility" of triggering a significant net emissions increase (i.e. 50% or greater of the NSR significance level) and, among this group, compel recurring annual reports only in cases where the reasonable possibility obtains absent the inclusion of excluded emissions. Furthermore, even the 50% threshold clarification did not arrive until litigation forced EPA to illumine the meaning of "reasonable possibility" in December of 2007; until then, the incertitude in the undefined term rendered the uncertainty in NSR reporting a mirror of the WEPCO period.

As the AQD does not agree with the commenter's proposition that each physical change necessitates an NSR report, the AQD does not agree with the commenter's conclusion that Detroit Edison River Rouge's NSR reporting is thus deficient, and therefore the AQD does not agree with the comment that each project for which NSR reports are lacking must be subjected to the actual-to-potential test.

EPA's Notice of Violation and Finding of Violation

On 7/24/2009, U.S. EPA Region 5 issued an NOV/FOV finding the Detroit Edison River Rouge Power Plant, among five in the DTE Energy system, in violation of PSD and NA NSR requirements for SO₂, NO_x, and/or PM. In reviewing the 2008 and 2009 NSR reports from Detroit Edison, AQD concludes "[b]ased on EPA's review, AQD considers Detroit Edison River Rouge Unit 3 not in compliance with

major NSR regulations.” (AQD reports B281007799 of 9/25/2009 and B281009386 of 3/11/2010) The commenter refers to these documents in claiming “[t]hat there is substantial evidence demonstrating that PSD and/or NNSR should have been and must be applied to the River Rouge Coal Plant.” (Letter, pg. 2)

AQD does not agree with the commenter’s view that these documents present substantial evidence of NSR violations at Detroit Edison River Rouge. Within the NOV/FOV, EPA assembles the following:

*In paragraph 44, EPA states that “DTE completed physical changes and/or changes in the method of operation at its River Rouge Electric Generating Station Unit 2 and Unit 3, as described in the attached Appendix C.” Similar statements concerning four additional DTE Energy facilities are included within paragraphs 42, 43, 45, and 46, and reference Appendices A, B, D, and E.

*The appendices are redacted by EPA from the public version of the NOV/FOV. DTE Energy provided a copy of the appendices to AQD in an email of 7/31/2009. Appendix C identifies the following projects conducted at Detroit Edison River Rouge: 8/1984 – 11/1984 at Unit 2; 3/1986 – 6/1986 at Unit 2; 3/1993 – 5/1993 at Unit 2; 3/2001 – 5/2001 at Unit 2; 3/1/1982 – 5/24/1982 at Unit 3; 5/1994 – 6/1994 at Unit 3; and 9/2005 – 11/2005 at Unit 3.

*In paragraph 52, EPA asserts “[e]ach of the physical changes and/or changes in the method of operation identified in the attached Appendices A through E, resulted in a significant net emissions increase, as defined at 40 C.F.R. §§ 52.21(b)(3)(i) and (b)(23)(i), of SO₂, NO_x, and/or PM.” In footnote 1 of the NOV/FOV, EPA explains the pre-NSR reform PSD citations are used.

*Therefore, in paragraphs 53 through 56, EPA reasons each of the projects constitutes a major modification under the PSD and NA NSR regulations. Thus, EPA concludes Detroit Edison River Rouge did not obtain the requisite PSD and/or NA NSR permits prior to commencement of the projects and is operating without having appropriate BACT or LAER emissions control equipment installed.

In applicability, obligations, and redress, the federal NSR program is specific to a physical area, each stationary source located within the area, each emission unit installed at the stationary source, each project conducted at the emission unit, each NSR pollutant emitted as a result of the project, and the attainment status of the area for each NSR pollutant. EPA reports significant net emissions increases of SO₂, NO_x, and/or PM at 35 projects involving 17 individual emission units across five DTE Energy facilities, with each project triggering the requirements of PSD and/or NA NSR. The NOV/FOV does not delineate which of the three pollutants EPA concludes have seen net emissions increases at River Rouge Unit 2 and River Rouge Unit 3, and EPA has chosen to withhold from the NOV/FOV the emissions information, methods of analysis, and calculations to support these determinations.

Thus, while AQD has and does acknowledge EPA’s claims, AQD does not believe sufficient evidence for the claims have been included within the NOV/FOV to compel the inclusion of a Schedule of Compliance in the ROP. The AQD believes that the ongoing EPA enforcement action is the most efficient mechanism for resolving these allegations at this time, and that issuance of the ROP with existing applicable requirements is appropriate. The PSD and NA NSR requirements identified by EPA as the basis for the alleged NSR violations are neither specifically identified in the ROP nor classified as non-applicable requirements in the ROP (please see Part E of each section of the permit), therefore, by General Condition 26 the permit shield afforded by the ROP provides no cover to the facility for the alleged violations. And the AQD does agree that the ROP should be appropriately modified or reopened in the future, in accordance with the procedures and timeframes of R 336.1216 and R 336.1217, to include any enforceable schedule of compliance and/or applicable requirements that result from any final enforcement action by the EPA.

Title V Application

The commenter argues AQD “under its authority contained in Mich. Admin. Code R. 336.1213(4)(c)(v), should require Detroit Edison to disclose all information about all modifications at its facilities as part of providing a full and complete [Title V] application upon which MDNRE can make a final permitting decision that includes a schedule for the River Rouge Coal Plant to come into compliance with the PSD and NNSR permitting requirements.” (Letter, pg. 29)

The rule cited by the commenter, R 336.1213(4), speaks not to the ROP application but to the conditions within the ROP itself: “each renewable operating permit shall contain terms and conditions” At subparagraphs (c) and (c)(v), each ROP is to require the facility to annually (at the least) certify compliance with the conditions therein, and each certification is to include “[o]ther facts as the department may require in the permit that are necessary to determine the compliance status of the stationary source.”

R 336.1210(2)(b) and (b)(2) address the commenter’s contention for the ROP renewal application submitted by Detroit Edison River Rouge. Rule 210(2) requires within an ROP application submittal “reasonable responses to all requests for information in the permit application form by the department” and a “certification of compliance with all applicable requirements”. And Rule 210(b)(2) speaks to the obligation of the facility when an application is deficient or in error:

Any person who fails to submit any relevant facts or who has submitted incorrect information in an application for a renewable operating permit, including an application for renewal or modification of a renewable operating permit, shall, upon becoming aware of the failure or incorrect submittal, promptly submit all supplementary facts or corrected information.

40 CFR 70.5(a) through (c) contain the federal equivalent to these rules; the comment appears to invoke EPA at paragraph 61 of the 7/24/2009 NOV/FOV:

Since August 15, 1996, DTE has failed and/or continues to fail to submit timely and complete Title V permit applications for the Monroe, St. Clair, River Rouge, Belle River, and Trenton channel power plants with information pertaining to the modifications identified in Appendices A through E, and with information concerning all applicable requirements, including, but not limited to, the requirement to apply, install and operate BACT or LAER for NO_x, SO₂, CO, PM, PM₁₀, and/or PM_{2.5} at the plants and also failed to supplement or correct the Title V permit applications for these plants in violation of Section 502, 503, and 504 of the [Clean Air] Act, 42 U.S.C. §§ 7661a, 7661b, and 7661c; the regulations at 40 C.F.R. Part 70, including, but not limited to, 40 C.F.R. §§ 70.1(b), 70.5(a), (b), and (c), 70.6 and 70.7(b), and Michigan’s Renewable Operating Permit Program, R 336.

EPA finds Detroit Edison River Rouge to be in violation of federal NSR requirements. Finding Detroit Edison’s Title V applications (i.e. the application for the initial ROP and the application for the renewal ROP) lack the applicable requirements EPA believes are properly imposed upon Units 2 and 3 through NSR, EPA concludes the Title V applications are deficient. The commenter, in consensus with the EPA’s finding of NSR violations at the facility, likewise asserts Detroit Edison’s renewal ROP application incomplete and concludes it will remain so until Detroit Edison provides an NSR demonstration for each modification at the plant (and all other plants operated by Detroit Edison).

AQD disagrees with the comment. AQD concludes the ROP renewal application submitted by Detroit Edison River Rouge is deficient only if NSR violations exist, and as stated above, the AQD has not found sufficient evidence in either the comments, Detroit Edison’s submittals, or in EPA’s NOV/FOV to arrive at such a determination. Otherwise, AQD cannot conclude Detroit Edison either “failed to submit any relevant facts” or “submitted incorrect information” in the ROP application.

AQD's ROP application forms do not require, and have not required, an NSR major stationary source to submit an NSR analysis for each physical change and change in the method of operation performed at the source as a condition of completeness; nor does the AQD read 40 CFR 70.5 or R 336.1210(2) to require such submittals for the ROP application to be considered complete.

AQD refers to the July 15, 1995 "EPA White Paper for Streamlined Development of Part 70 Permit Applications" (hereafter White Paper) for clarity. The White Paper was issued by EPA in response to concerns that the preparation of Title V permit applications was proving to be more extensive than anticipated; in part, EPA reasoned, because uncertainty in the Part 70 [Title V] language was leading to confusion "as to the expectations of complete permit applications . . ." (White Paper, pg. 1) In the White Paper, EPA explains the "[Title V] operating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives." (White Paper, pg. 1) The guidance streamlines the permit application process by allowing for, among others, "[c]ertifications of compliance status which do not require re-evaluation of previous applicability decisions." Rather, "[i]nformation for applicability purposes need only be detailed enough to resolve any open questions about which requirements apply." (White Paper, pgs. 2 and 3) The streamlining of an ROP application does not reduce or eliminate the facility's obligation to operate in compliance with all applicable requirements:

"Companies are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications. However, EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any past noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application." (White Paper, pg. 25 and 26)

Based on the guidance set forth by EPA in the White Paper, the AQD disagrees with the commenter's argument that the facility's ROP application is not complete until and unless it includes information sufficient to evaluate the NSR applicability of all modifications conducted at the facility. To require such submittals through the ROP application process is to compel a reporting obligation beyond that of the existing reporting obligations imposed by the NSR regulations. By certifying compliance with all applicable requirements in the ROP application, the facility certifies the NSR reviews have been performed properly in accordance with the NSR regulations. From AQD's perspective, the facility's previously submitted NSR reports and CAMD data is sufficient to resolve the commenter's NSR queries (i.e. open questions) and, as explained above, the AQD does not find sufficient documentation in EPA's NOV/FOV to allow the AQD to reach EPA's conclusions. Therefore, while the EPA finds Detroit Edison River Rouge's ROP application lacking, the AQD does not.

AQD disagrees with the comment's implication, intended or not, that the Detroit Edison River Rouge ROP application is incomplete unless, and until, it communicates all information relating to all modifications at Detroit Edison's facilities. Read literally, AQD surmises the commenter asserts an ROP application is only complete when an NSR analysis is presented within for each physical change and change in the method of operation at all Detroit Edison's facilities.

The requirement to obtain an ROP is confined to those facilities meeting the definition or prescription attending the terms "stationary source" and "group of stationary sources" at R 336.1119(r) and R 336.1211(1), and the information necessary to be included in an ROP application for a "stationary source" or "group of stationary sources" is confined to the emissions units thereof (R 336.1210(1) through (3)). The theoretical construct comprising Detroit Edison's aggregated facilities neither qualifies as a "stationary source" nor a "group of stationary sources" at R 336.1119(r) and R 336.1211(1), because the elements within the construct are not all located within a contiguous area. Therefore, this theoretical construct is not required to obtain an ROP under R 336.1210(1) and an ROP application submitted pursuant to R 336.1210(1) for any one of the individual facilities within the construct (e.g.

Detroit Edison River Rouge) is not required to include information pertaining to all of the other individual facilities (e.g. Detroit Edison Monroe, Detroit Edison Trenton Channel, etc.) operated by Detroit Edison.

In conclusion, for the aforementioned reasons, the AQD does not agree Detroit Edison should be required to include all information about all modifications at its facilities in order to provide a complete ROP application for the River Rouge Power Plant.

Summary of AQD's Response to Comment I

The commenter asserts "[t]here is substantial evidence demonstrating that PSD and/or NNSR should have been and must be applied to the River Rouge Coal Plant" and therefore concludes "it would be arbitrary, capricious, and contrary to law for MDNRE to fail to include a schedule for requiring the River Rouge Coal Plant to comply with major source PSD and NNSR permitting in the Title V permit for the plant." (Letter, pg. 2)

As explained in the review above, the AQD does not find substantial evidence of PSD or NA NSR violations at Detroit Edison River Rouge. Specifically, the AQD does not find evidence of an NSR violation in the NSR emissions reports associated with the 9/2005 outage at Unit 3 or the 3/2006 outage at Unit 2. Reviewing the information presented by the commenter and information submitted to the AQD by Detroit Edison River Rouge, AQD does not find evidence of an NSR violation associated with five projects identified by the commenter from Detroit Edison's filings with the PSC. The AQD does not find merit in the commenter's assertion that, in addition to those activities named by the commenter, the AQD must review every physical change at the facility and subject such investigations for public comment before further action is taken on the ROP renewal; the AQD concludes the NSR investigations conducted to date outside of and within this document meet the standard of review imposed within the NSR regulations. Though acknowledging EPA's finding of NSR violations in an NOV/FOV of 7/24/2009, AQD has determined the NOV/FOV lacks sufficient factual support to compel redress within the ROP renewal process. Finally, AQD does not find Detroit Edison must submit an NSR analysis for each project in order for the River Rouge ROP renewal application to be deemed complete.

In sum, the AQD disagrees that a Schedule of Compliance must necessarily be included in the ROP and therefore disagrees with the comment.

Comment II.A (Letter, pg. 30):

The commenter states that the draft ROP cannot be issued without including more frequent monitoring for particulate matter (PM). The draft ROP requires a PM test at Unit 2 and Unit 3 during the term of the permit. The commenter notes this language results in an indefinite testing schedule, as Title V permits often are renewed outside of the nominal 5-year permit term. The commenter requests either installation of a PM Continuous Emissions Monitoring System (CEMS) or annual stack testing.

AQD's Response to Comment II.A:

Unit 2 and Unit 3 are each limited to 0.175 pounds of particulate matter (PM) per thousand pounds of exhaust gases on a wet basis corrected to 50% excess air. The limits are established under authority of R 336.1331(1)(a) and therefore the pollutant is coarse, filterable PM. Testing conducted in 9/2008 measured PM emission rates from Units 2 and 3 at 0.032 and 0.008 pounds per thousand pounds, wet, at 50% excess air, respectively. Three tests conducted in 3/2009 and 4/2009 measured PM emissions from Unit 2 at 0.008, 0.016, and 0.015 pounds per thousand pounds of exhaust gases, wet, at 50% excess air. The average opacity measured less than 5% during each of these tests.

The AQD agrees that the agency has the ability to require more frequent testing and the permit language may be refined to provide a definite testing schedule. The 3/19/2002 language of R 336.2001(1)(e), which was incorporated into the SIP on 6/1/2006 (71 FR 31093), authorizes the AQD to direct a facility to conduct a performance test for any attainment pollutant where the emission unit has potential emissions of the attainment pollutant in excess of 100 tons per year and where more than 36 months have passed since the date of the last test. PM emissions from Units 2 and 3 meet the conditions of this rule and

therefore the AQD will amend Condition V.1 of FG-BOILERS_2_&_3 to require PM tests once every 3 calendar years. As the most recent PM tests conducted by the facility have measured emissions at less than one-fifth the emission limit, and typically around one-tenth the limit, the AQD does not agree annual emissions tests will substantially improve stack testing as a responsive compliance measure for the PM emission limit. The AQD finds performance tests useful as a compliance measure where the purpose of the test is to determine if the emission unit's characteristic (i.e. day-by-day) operations comply with an emission limit. Detroit Edison River Rouge's performance tests in 2008 and 2009 indicate Unit 2 and Unit 3 comply with their respective PM limits under normal operating conditions. Performance tests are less useful in determining compliance during atypical operations because the recurring tests are rarely frequent enough to coincide with abnormal operating periods; for this, a more continual monitoring method is required.

The Compliance Assurance Monitoring (CAM) regulation was promulgated at 40 CFR 64 to provide frequent, periodic compliance monitoring for an emission unit where, as here for Unit 2 and Unit 3, potential emissions exceed 100 tons per year for a pollutant with an applicable emission limit (in this case, filterable PM) and a control device (in this case, an electrostatic precipitator, or ESP) is relied upon to meet the emission limit. Detroit Edison River Rouge's PM CAM Plans are based on the "Proposed CAM Protocol for an ESP Controlling PM from a Coal-Fired Boiler", posted 4/21/2003 on the EPA's TTN (Technology Transfer Network) EMC (Emission Measurement Center) Compliance Assurance Monitoring webpage: "[t]his protocol provides a monitoring approach that you may use to comply with the Compliance Assurance Monitoring (CAM) Rule (40 CFR 64) or with 40 CFR Part 70 or 71 periodic monitoring requirements for PM." (ESP CAM protocol, pg. 1)

As recommended in the ESP CAM protocol, Detroit Edison utilizes a continuous emissions monitoring system for visible emissions (COMS) measuring opacity in the ESP exhaust stack as the continuous indicator for PM compliance. The COMS is already imposed upon Unit 2 and Unit 3 through the federal Acid Rain program and through AQD's permit to install program (please see Condition VI.2 of FG-BOILERS_2_&_3) to demonstrate continuous compliance with the R 336.1301(1)(a) and the Michigan SIP. Per the Acid Rain regulations at 40 CFR 75.10(d)(2), each COMS is required to operate when the emission unit operates and is required to accurately record the opacity in the exhaust stack of the emission unit not less than once every ten seconds.

Detroit Edison correlated PM emissions and opacity at various stages of ESP efficiency for Unit 2 and Unit 3 through the Electric Power Research Institute's (EPRI) Electrostatic Precipitator Performance Model (ESPM), which is one of three models accepted by the EPA for use in the ESP CAM protocol (please see 8/17/2009 letter from Detroit Edison River Rouge). For Unit 2 at low (95.87%) efficiency, the EPRI ESPM predicts opacity of 33.5% at 0.114 pounds PM per thousand pounds of exhaust gases on a wet basis corrected to 50% excess air. For Unit 3 at low (95.30%) efficiency, the EPRI ESPM predicts opacity of 30.8% at 0.123 pounds PM per thousand pounds of exhaust gases on a wet basis corrected to 50% excess air.

Detroit Edison has proposed an "opacity trigger" of any two or more consecutive, one hour block average opacity values greater than 20% as measured by the COMS (please see Condition VI.5 of FG-BOILERS_2_&_3). At near 20% opacity (19.0% for Unit 2 and 19.3% for Unit 3), the model predicts emission rates of 0.038 pounds PM and 0.052 pounds PM, respectively at Unit 2 and Unit 3, per thousand pounds of exhaust gases on a wet basis corrected to 50% excess air. AQD finds the proposed 20% opacity value sufficiently protective of the PM emission limit. The PM emission limit is established under authority of Rule 301(1) and thus by Rule 331(2) compliance with the emission limit is to be conducted under State reference test method 5B or 5C (please see Condition I.1 of FG-BOILERS_2_&_3). The standard test period for these test methods is the average of three one-hour test runs, therefore, the AQD finds the proposed two-hour averaging period sufficiently protective of the PM emission limit.

Should visible emissions exceed 20% over the course of two or more hours an “excursion”, or departure, of the indicator range has occurred and is considered indicative of abnormal operation. An excursion event initiates action on the part of the facility to restore the emission unit and control device to “non-excursion” or normal (i.e. compliant) status and to determine if an exceedance of the PM emission limit occurred during the excursion period (please see Condition VI.7 of FG-BOILERS_2_&_3). Excursion and exceedance events are required to be reported to the AQD within each ROP semiannual reporting period (please see Condition VII.8 of FG-BOILERS_2_&_3).

Based on the proper implementation of CAM, as described above, the AQD believes a sufficient method is in place at both Unit 2 and Unit 3 to provide continuous compliance monitoring for the PM emission limits. The AQD concludes the installation of PM CEMS is redundant and therefore unnecessary.

Comments II.B through F (Letter, pgs. 30 through 40):

The commenter states that the ROP should contain more stringent requirements per the Michigan Environmental Protection Act (MEPA) and per Rule 901. To the extent that the Clean Air Act and AQD administrative rules fail to adequately protect air and other natural resources, MEPA and Rule 901 require the agency to apply more stringent standards. Based on MEPA and Rule 901 the commenter calls for the AQD to introduce limits on emissions of greenhouse gases, PM_{2.5}, and mercury into the ROP.

AQD’s Response to Comments II.B through F:

As noted by the commenter, the “threshold question under MEPA” is whether the source “pollute[s], impair[s], or destroy[s] the environment.” The commenter states that the AQD must evaluate whether the River Rouge Plant “poses a significant enough risk to natural resources or the environment to trigger MEPA.” It has not been established in court that emissions from the source impair or destroy the environment. In fact, compliance with applicable requirements in the ROP is designed to maintain compliance with National Ambient Air Quality Standards (NAAQS), which are established by the USEPA under the Clean Air Act to protect human health, safety and welfare, i.e., to maintain a healthy, functional environment. Michigan’s State Implementation Plan, which includes administrative rules other than Rule 901, contains the applicable requirements for attaining and maintaining the NAAQS, and the rules applicable to this source are included in the ROP. Therefore, the AQD disagrees with the commenter and concludes that MEPA requirements are met through the Permit to Install program and other regulatory requirements embodied in the ROP.

Rule 901 is included as an enforceable condition of the ROP as General Condition No. 12. Rule 901 prohibits the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property; or which causes unreasonable interference with the comfortable enjoyment of life and property. This rule has primarily been used to address a variety of situations including odors and particulate deposition. Rule 901 does not specify emission limits for criteria pollutants, greenhouse gases, mercury, or any other regulated pollutants, and is not intended to be used for the purpose of achieving compliance with the emissions standards set forth in the NAAQS or elsewhere. The commenter did not provide sufficient information demonstrating that that the renewal of the ROP for this existing source of emissions would result in a violation of Rule 901.

The commenter has not identified any existing applicable requirement (as defined in R 336.1101(o)) for greenhouse gases or PM_{2.5} that has not been previously identified in the ROP. Every requirement included in an ROP must be based upon an existing law, regulation, or permit. If new greenhouse gas or PM_{2.5} emission standards are developed for fossil fuel-fired electric generation units, the AQD must reopen the ROP as provided in R 336.1217 if three or more years remain in the term of the permit. Regardless of whether the ROP is reopened to include any new emission standards, the facility is still required to comply with all state and federal requirements.

As noted under the Regulatory Analysis Addendum section of this Staff Report Addendum, EU-BOILER#2 and EU-BOILER#3 is each potentially subject to mercury emissions limitations under the

forthcoming MACT UUUUU. MACT UUUUU is scheduled to become effective sixty days after publication in the Federal Register. The first compliance date for the standard will be 3 years after the effective date of the standard. Part 15 of Michigan Air Pollution Control Rules addresses new requirements pertaining to mercury in the State of Michigan, but these requirements may be superseded by MACT UUUUU. The AQD will add conditions to FG-BOILERS_2_&_3 in the proposed ROP requiring EU-BOILER#2 and EU-BOILER#3 to comply with applicable requirements of both the Part 15 rules and MACT UUUUU. The AQD will reopen the ROP as necessary to include specific requirements from these regulations when the emissions limits and chosen method(s) of compliance are clarified.

Changes to the July 19, 2010 Draft ROP

Following the 30-day public comment period, the Department of Natural Resources and Environment (DNRE) was abolished and the authority to issue this permit transferred to the Department of Environmental Quality (DEQ). Any references within the draft ROP to the MDNRE and the Department of Natural Resources and Environment have been replaced with the MDEQ and the Department of Environmental Quality, respectively.

The following changes were made to the July 19, 2010 draft ROP in response to the comments received during the 30-day public comment period:

FG-BOILERS_2_&_3, Condition V.1 – The first sentence has been changed. Where formerly a PM test on Unit 2 and Unit 3 was to be conducted once within the term of the permit or upon request of AQD, the condition now requires a test within 270 days of the issuance date of this permit and thereafter on a periodic basis within 3 calendar years of the previous test, or upon request of AQD.

FG-BOILERS_2_&_3, Conditions IX.11 through 13 – Conditions added to address future applicable HAP rules that might come into effect during the permit term pursuant to either Part 15 of Michigan Air Pollution Control Rules or 40 CFR 63, Subparts A and UUUUU.

The following additional changes were made to the July 19, 2010 draft ROP:

EU-AUX_BOILER, Condition IX.2 – Condition IX.2 is added to address the future applicability of the federal National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (MACT DDDDD) to the emission unit. EU-AUX_BOILER is an existing unit with an initial compliance date of March 21, 2014 (40 CFR 63.7495). On March 21, 2011, EPA initiated a reconsideration of the standard and published a proposed rule on December 23, 2011 (76 FR 80598). As the final language of the MACT DDDDD regulation may change as a result of EPA reconsideration process the specific emission and operating limitations have not been cited within the EU-AUX_BOILER. The ROP will be reopened or revised as necessary to include this information in accordance with Rule 217.

FG-DG_PEAKERS, Condition IX.1 – Condition IX.1 is added to address the future applicability of the federal National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT or MACT ZZZZ) to the emission units within the flexible group.

In a letter dated August 27, 2010, Detroit Edison River Rouge submitted an initial notification form to the AQD declaring that the four diesel-fired peaking units at the plant (EU-PEAKER_DG11-1, EU-PEAKER_DG11-2, EU-PEAKER_DG11-3, EU-PEAKER_DG11-4) are subject to the RICE MACT at 40 CFR 63, Subparts A and ZZZZ (MACT ZZZZ). Each peaking is installed prior to December 19, 2002, each has a site rating in excess of 500 hp, and each is of compression ignition (CI) design, therefore, each qualifies as an existing CI stationary RICE under the standard with an initial compliance date of May 3, 2013 (40 CFR 63.6595(a)(1)). The AQD has included at Condition IX.1 a requirement that the emission unit comply with the RICE MACT. As Detroit Edison River Rouge is uncertain how or if the peaking units will operate to comply with the MACT ZZZZ regulation, specific emission and operating

limitations have not been cited within the flexible group. The ROP will be reopened or revised as necessary to include the facility's chosen compliance method when this information becomes available.

EU-BACKUP_DG – This emission unit table has been replaced with FG-EMERDG_FSUPPLY. Detroit Edison notified the AQD that three emergency diesel generators are located at the facility, where previously one had been reported, therefore, the emission unit table was converted to a flexible group containing the emission units EU-EMERDG_DPRHS, EU-EMERDG_TFRHS, EU-EMERDG_UNLHS. Each generator is a 10 kW unit used in the coal fueling houses to supply emergency lighting in the event of a power failure. Each generator was ordered by the facility on October 18, 2006 and is therefore subject to both the MACT ZZZZ and the federal New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines at 40 CFR 60, Subparts A and IIII; compliance with MACT ZZZZ is determined through NSPS IIII compliance (40 CFR 63.6590(c)). These generators are required to comply with emissions standards at 40 CFR 60.4205(a) and related monitoring and recordkeeping provisions. The generators are also required to fire ultra-low sulfur diesel fuel (40 CFR 80.510(b)); ultra-low sulfur diesel fuel meets the sulfur in fuel requirements of Rule 401(1) and therefore these conditions have been combined. The applicable NSPS IIII requirements have been added to FG-EMERDG_FSUPPLY.

Michigan Department of Environmental Quality
Air Quality Division

State Registration
Number

RENEWABLE OPERATING PERMIT

ROP Number

B2810

**OCTOBER 16, 2015 STAFF REPORT FOR RULE 216(2)
MINOR MODIFICATION**

MI-ROP-B2810-2012a

Purpose

On April 1, 2012, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2810-2012 to Detroit Edison Company, River Rouge Power Plant pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

General Information

Responsible Official:	Mr. Nader Rajabian, Plant Manager 313-297-8218 (Section 1) Mr. Ryan Randazzo, Plant Manager – Peakers 734-362-2017 (Section 2)
AQD Contact:	Kirsten S. Clemens, P.E., Environmental Engineer 517-582-5913
Application Number:	201200112
Dates Application Minor Modifications Were Submitted:	July 20, 2012

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

Description of Changes to the ROP

Permit to Install (PTI) No. 215-06B is incorporated into the ROP. PTI 215-06B clarifies and makes corrections to the language within FG-PCI-COAL_HAND, a flexible group containing requirements for the pulverized coal injection (PCI) system.

Since issuance of MI-ROP-B2810-2012, the Detroit Edison Company has been renamed the DTE Electric Company; the change has been incorporated into MI-ROP-B2810-2012a.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

Action Taken by the DEQ

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B2810-2012, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District

Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.

State Registration
Number

RENEWABLE OPERATING PERMIT

ROP Number

B2810

**DECEMBER 1, 2015 STAFF REPORT ADDENDUM FOR
RULE 216(2) MINOR MODIFICATION**

MI-ROP-B2810-2012a

Purpose

A Staff Report dated October 16, 2015, was developed in order to set forth the applicable requirements and factual basis for the proposed Minor Modification to the Renewable Operating Permit's (ROP) terms and conditions as required by R 336.1216(2)(c). The purpose of this Staff Report Addendum is to summarize any significant comments received on the proposed ROP modification during the U.S. Environmental Protection Agency's (USEPA) 45-day comment period as described in R 336.1216(2)(c). In addition, this addendum describes any changes to the proposed ROP Minor Modification resulting from these pertinent comments.

General Information

Responsible Official:	Mr. Nader Rajabian, Plant Manager 313-297-8218 (Section 1) Mr. Ryan Randazzo, Plant Manager – Peakers 734-362-2017 (Section 2)
AQD Contact:	Kirsten S. Clemens, P.E., Environmental Engineer 517-582-5913

Summary of Pertinent Comments

No pertinent comments were received during the USEPA's 45-day comment period.

Changes to the October 16, 2015 Proposed ROP Minor Modification

No changes were made to the proposed ROP Minor Modification.

State Registration
Number

RENEWABLE OPERATING PERMIT

ROP Number

B2810

SEPTEMBER 13, 2016 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

MI-ROP-B2810-2012b

Purpose

On December 1, 2015, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2810-2012a to Detroit Edison Company, River Rouge Power Plant pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

General Information

Responsible Official:	Nader Rajabian, Plant Manager 313-297-8218 (Section 1)
AQD Contact:	Caryn E. Owens, Environmental Quality Analyst 231-876-4414
Application Number:	201600067
Date Application For Minor Modification Was Submitted:	March 28, 2016

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

Description of Changes to the ROP

Incorporate PTI Nos. 82-15A and 40-08H into Section 1 of the ROP, PTI 82-15A was to install air emission control systems, Dry Sorbent Injection (DSI) and Activated Carbon Injection (ACI), on Boiler Unit 3 at River Rouge, as part of the proposed Mercury and Air Toxics Standards (MATS) in accordance with 40 CFR Part 63, Subpart UUUUU.

PTI 40-08H was to remove EU-BOILER#2 since it was retired in April 2016, and removes the ability to combust recovered paint solids (RPS) from the fuel portfolio for EU-BOILER#3.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

Action Taken by the DEQ

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B2810-2012a, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents

of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.

RENEWABLE OPERATING PERMIT

**NOVEMBER 1, 2016 - STAFF REPORT ADDENDUM
FOR RULE 216(2) MINOR MODIFICATION**

Purpose

A Staff Report dated September 13, 2016, was developed in order to set forth the applicable requirements and factual basis for the proposed Minor Modification to the Renewable Operating Permit's (ROP) terms and conditions as required by R 336.1216(2)(c). The purpose of this Staff Report Addendum is to summarize any significant comments received on the proposed ROP modification during the U.S. Environmental Protection Agency's (USEPA) 45-day comment period as described in R 336.1216(2)(c). In addition, this addendum describes any changes to the proposed ROP Minor Modification resulting from these pertinent comments.

General Information

Responsible Official:	Nader Rajabian, Plant Manager 313-297-8218 (Section 1)
AQD Contact:	Caryn E. Owens, Environmental Quality Analyst 231-876-4414

Summary of Pertinent Comments

No pertinent comments were received during the USEPA's 45-day comment period.

Changes to the September 13, 2016 Proposed ROP Minor Modification

No changes were made to the proposed ROP Minor Modification.

State Registration Number

B2810

RENEWABLE OPERATING PERMIT

JULY 1, 2021 STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

ROP Number

MI-ROP-B2810-2012c

Purpose

On November 1, 2016, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2810-2012b to DTE Electric Company - River Rouge Power Plant pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(2).

General Information

Responsible Official:	Nader Rajabian, Plant Manager – River Rouge Power Plant 313-297-8218 (Section 1) Margaret Guillaumin, Plant Manager – Peakers 810-324-3218 (Section 2)
AQD Contact:	Caryn Owens, Environmental Engineer 231-878-6688
Application Numbers:	202100086 202100095
Date Applications for Minor Modifications were Submitted:	May 21, 2021 and June 15, 2021

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to Rule 216(2).

Description of Changes to the ROP

Minor Modification Number 202100086 was to update the ROP Conditions due to EU-BOILER#3, EU-AUX_BOILER, EU-DSI_METERTRLR, EU-ACI_SILO1, EU-ACI_SILO2, EU-FLYASH_SILO#1, EU-FLYASH_SILO#2 retirement from the facility on June 1, 2021 and rendered inoperable. With retiring these emission units, the facility requested to remove the emissions units and respective flexible groups (FG-DSI/ACI, FG-MODULAR, and FG-FLYASH-HANDLG) from the ROP.

Minor Modification Number 202100095 was to update the ROP Conditions due to EU-BOILER#1 retiring from the facility June 7, 2021 and rendered inoperable.

Retiring these 8 emission units will decrease the facility emissions.

Additionally, on June 14, 2021, the facility requested to have their Acid Rain Permit under Title IV and Clean Air Interstate Rule (CAIR) permits voided. AQD submitted a letter to DTE dated June 17, 2021 voiding the Acid Rain and CAIR permits. Appendix 10-1, the Acid Rain Permit for the facility, was removed from the ROP at this time.

As of the retirement dates on June 7, 2021, April 16, 2016, and June 1, 2021, Units 1, 2, and 3, respectively, shall not emit any sulfur dioxide and nitrogen oxides and may not resume operation, unless the designated representative of the source submits a complete Acid Rain permit application per 40 CFR 72.31 not less than 24 months prior to the date on which the unit(s) is first to resume operation.

Note that after the retirement of the main boilers, the NAICS code for the facility will remain 221112. The peaking units are the primary operation at the facility and also fall under this NAICS code.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

Action Taken by EGLE

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B2810-2012b, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the United States Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.