INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



We Protect Hoosiers and Our Environment.

Michael R. Pence Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: May 22, 2013

RE: Duke Energy Indiana, Inc. - Henry Generating Station / 065 - 32753 - 00032

FROM: Matthew Stuckey, Branch Chief

> Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

For an initial Title V Operating Permit, a petition for administrative review must be submitted to the Office of Environmental Adjudication within thirty (30) days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a Title V Operating Permit renewal, a petition for administrative review must be submitted to the Office of Environmental Adjudication within fifteen (15) days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3)The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:



Page 1 of 2 FNTVOP.dot 03/23/06

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency 401 M Street Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

IDEM

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Duke Energy Indiana, Inc. - Henry Generating Station 6045 West State Road 38 New Castle, Indiana 47362

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T065-32753-00032	
Issued by: Snyuran Smha Tripurari P. Sinha, Ph. D., Section Chief	Issuance Date: May 22, 2013
Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Expiration Date: May 22, 2018

A. SOURC	E SUMMARY	5
A.1	General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]	
	[326 IAC 2-7-5(14)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]	
۸.5		
	[326 IAC 2-7-5(14)]	
A.4	Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]	
A.5	Part 70 Permit Applicability [326 IAC 2-7-2]	
	ALL CONDITIONS	_
	AL CONDITIONS	7
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)]	
	[IC 13-15-3-6(a)]	
B.3	Term of Conditions [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-7-7] [IC 13-17-12]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]	
B.14	Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]	
B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination	
	[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]	
B.16	Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]	
B.17	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]	
B.17 B.18	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]	
D. 10		
D 40	[326 IAC 2-7-12(b)(2)]	
B.19	Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]	
B.20	Source Modification Requirement [326 IAC 2-7-10.5]	
B.21	Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.22	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.23	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]	
B.24	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]	
C. SOURC	E OPERATION CONDITIONS	18
Emissio	on Limitations and Standards [326 IAC 2-7-5(1)]	
C.1	Particulate Emission Limitations For Processes with Process Weight Rates	
	Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Stack Height [326 IAC 1-7]	
C.7	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	D	
_	Requirements [326 IAC 2-7-6(1)]	
C.8	Performance Testing [326 IAC 3-6]	
_		
	ance Requirements [326 IAC 2-1.1-11]	
C.9	Compliance Requirements [326 IAC 2-1.1-11]	

TABLE OF CONTENTS

Duke Energy Indiana, Inc. - Henry Generating Station

Page 3 of 43

New Castle, Indiana

Page 3 of 43

T065-32753-00032

Permit Review	er: Muhammad D. Khan)Z
	nce Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)] Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]	
C.11	Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]	
Correctiv	ve Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]	
C.12	Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]	
C.13	Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]	
C.14	Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]	
C.15	Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]	
Record I	(seeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]	
C.16	Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]	
C.17	General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]	
C.18	General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]	
Stratosn	heric Ozone Protection	
	Compliance with 40 CFR 82 and 326 IAC 22-1	
D.1. EMISS	IONS UNIT OPERATION CONDITIONS2	25
Emissio	n Limitations and Standards [326 IAC 2-7-5(1)]	
	PSD Minor Limits [326 IAC 2-2]	
D.1.2	Preventive Maintenance Plan [326 IAC 2-7-5(13)]	
Complia	nce Determination Requirements	
	Continuous Emission Monitoring System for NOX [326 IAC 3-5]	
	Continuous Emission Monitoring System for CO [326 IAC 3-5]	
	Reeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]	
	Record Keeping Requirement	
D.1.6	Reporting Requirement	
E.1. EMISS	IONS UNIT OPERATION CONDITIONS2	<u>?</u> 7
	n Limitations and Standards [326 IAC 2-7-5(1)]	
	General Provision Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]	
	Standard of Performance for Stationary Gas Turbines [326 IAC 12-1] [40 CFR 60, Subpart GG]	

E.2. EMISSIONS UNIT OPERATION CONDITIONS28

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- E.2.1 Acid Rain Permit [326 IAC 2-7-5(1)(C)] [326 IAC 21] [40 CFR 72 through 40 CFR 78]
- E.2.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)] [326 IAC 21]

Nitrogen	ir Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and n Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units 26 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)	36
G.1	Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)]	
0.0	[326 IAC 24-3-7(e)] [40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]	
G.2	Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)]	
0.0	[326 IAC 24-3-4(a)] [40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]	
G.3	Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)]	
	[326 IAC 24-2-4(b)] [326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)] [40 CFR 97.306(b)]	
G.4.1	Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]	
G.4.1 G.4.2	Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.100(c)]	
G.4.2 G.4.3	Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)]	
0.4.0	[40 CFR 97.306(c)]	
G.5	Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)]	
	[326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]	
G.6	Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)]	
	[326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)]	
	[40 CFR 97.306(e)]	
G.7	Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)]	
	[40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]	
G.8	Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)]	
0.0	[40 CFR 97.206(f)] [40 CFR 97.306(f)]	
G.9	Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)]	
G.10	[326 IAC 24-3-4(g)] [40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]	
G.10	CAIR Designated Representative and Alternate CAIR Designated Representative [326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB]	
	[326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB]	
	[40 Of IX 97, Subpart BBB] [40 Of IX 97, Subpart BBBB]	
Certification	າ	36
Emergency	Occurrence Report	37
Quarterly R	Report3	9-40
Quarterly D	Deviation and Compliance Monitoring Report	41

Attachments:

Attachment A: 40 CFR 60, Subpart GG—Standards of Performance for Stationary Gas Turbines Attachment B: Acid Rain Permit

Duke Energy Indiana, Inc. - Henry Generating Station

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Page 5 of 43 T065-32753-00032

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary Electric Generating Power Plant.

Source Address: 6045 West State Road 38, New Castle, Indiana 47362

General Source Phone Number: 317-838-6937

SIC Code: 4911 County Location: Henry

Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Operating Permit Program

Minor Source, under PSD and Emission Offset Rules Minor Source. Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2 and Unit 3, installed in November 1999, equipped with water-injection for NO_X control and continuous emission monitoring system (CEMs) for NOX and CO emissions, exhausting to stacks 1 through 3, nominally rated at 407.8 million British thermal units, each.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

- (a) Paved and unpaved roads and parking lots with public access. [326 IAC6-4]
- A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source consist of following insignificant activities which are not specifically regulated, as defined in 326 IAC 2-7-1(21) that have applicable requirements.

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, rated at a total of 0.48 million British thermal units per hour, including:
 - (1) Four (4) space heaters, rated at 0.10 million British thermal units per hour, each.
 - (2) One (1) space heater, rated at 0.08 million British thermal units per hour.
- (b) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids, including: Six (6) drums of lubricating oils, capacity: 55 gallons.

Duke Energy Indiana, Inc. - Henry Generating Station Page 6 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

- (d) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume.
- (e) Noncontact cooling tower systems with either of the following: forced and induced draft cooling tower system not regulated under a NESHAP.
- (f) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (g) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (h) On-site fire and emergency response training approved by the department.
- (i) Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hours or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:
 - (a) One (1) waste oil tank, identified as Tank 3, installed in 1999, exhausting to the atmosphere, with a maximum capacity of: 5,312 gallons of waste oil.
 - (b) One (1) Econoline Model 48-2 Super grit blaster equipped with a 100 cfm dust collector.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).
- (c) It is an affected source under Title IV (Acid Deposition Control) of the Clean Air Act, as defined in 326 IAC 2-7-1(3);

Duke Energy Indiana, Inc. - Henry Generating Station Page 7 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

- (a) This permit, T065-32753-00032, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

Duke Energy Indiana, Inc. - Henry Generating Station Page 8 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

- (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Duke Energy Indiana, Inc. - Henry Generating Station Page 10 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch) Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

Duke Energy Indiana, Inc. - Henry Generating Station Page 11 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order. Duke Energy Indiana, Inc. - Henry Generating Station Page 12 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T065-32753-00032 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification,

Duke Energy Indiana, Inc. - Henry Generating Station Page 13 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

Duke Energy Indiana, Inc. - Henry Generating Station Page 14 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]
- (c) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

Duke Energy Indiana, Inc. - Henry Generating Station Page 15 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management Permit Administration and Support Section, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.
- (f) This condition does not apply to emission trades of SO₂ or NO_X under 326 IAC 21 or 326 IAC 10-4.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permit Administration and Support Section, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Duke Energy Indiana, Inc. - Henry Generating Station Page 17 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of

Duke Energy Indiana, Inc. - Henry Generating Station Page 19 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in
 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control
 requirements are applicable for any removal or disturbance of RACM greater than three
 (3) linear feet on pipes or three (3) square feet on any other facility components or a total
 of at least 0.75 cubic feet on all facility components.
- (f) Demolition and Renovation
 The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Licensed Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The
 requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Duke Energy Indiana, Inc. - Henry Generating Station Page 20 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

Testing Requirements [326 IAC 2-7-6(1)] C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Duke Energy Indiana, Inc. - Henry Generating Station Page 21 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include. but is not limited to, the following:

Page 22 of 43

- (1) monitoring results;
- (2) review of operation and maintenance procedures and records; and/or
- (3)inspection of the control device, associated capture system, and the process.
- Failure to take reasonable response steps shall be considered a deviation from the (d) permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- A retest to demonstrate compliance shall be performed no later than one hundred eighty (b) (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6] C.16 Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- Indicate estimated actual emissions of regulated pollutants as defined by (2)326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue MC 61-50 IGCN 1003 Indianapolis, Indiana 46204-2251

Duke Energy Indiana, Inc. - Henry Generating Station New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following:
 - (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

Page 23 of 43

T065-32753-00032

- (BB) The dates analyses were performed.
- (CC) The company or entity that performed the analyses.
- (DD) The analytical techniques or methods used.
- (EE) The results of such analyses.
- (FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or

Duke Energy Indiana, Inc. - Henry Generating Station Page 24 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

Duke Energy Indiana, Inc. - Henry Generating Station Page 25 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2 and Unit 3, installed in November 1999, equipped with water-injection for NO_X control and continuous emission monitoring system (CEMs) for NOX and CO emissions, exhausting to stacks 1 through 3, nominally rated at 407.8 million British thermal units, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

- (a) The potential to emit of NO_X from the three (3) combustion turbines shall be limited to less than a total of 249.7 tons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The potential to emit of CO from the three (3) combustion turbines shall be limited to less than a total of 249.8 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the above limits (which will be shown using CEMS data) combined with potential NOx and CO emission from other emission units shall limit the NOx and CO emissions to less than 250 tons per year, each and will render 326 IAC 2-2 (PSD) not applicable to the 1999 modification.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan (PMP), is required for the three (3) combustion turbines firing natural gas identified as Unit #1, 2 &3 and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.3 Continuous Emission Monitoring System (CEMS) for NOX [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d) (Continuous Monitoring of Emissions), the Permittee shall install, calibrate, certify, operate, and maintain continuous emission monitoring system(s) (CEMS) and related equipment for measuring NOX emissions rates in lbs/hr from stack 1 through 3, in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) The continuous emissions monitoring system(s) (CEMS) for NOX emission rates shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration, maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a) [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5].
- (c) NOX CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (d) In the event that a breakdown of NOX continuous emission monitoring system required by this permit occurs, a record shall be made of the times and reasons of the breakdown

Duke Energy Indiana, Inc. - Henry Generating Station Page 26 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

and efforts made to correct the problem.

(e) Whenever a NOX CEM is down for more than twenty-four (24) hours, the Permittee shall follow good air pollution control practices.

- (f) Whenever the NOX CEMS is malfunctioning or down for repair or adjustments, the Permittee shall use a data substitution procedure for the NOX CEMS that is consistent with the requirements of 40 CFR 75.33(a), Standard missing data procedure for NOX.
- (g) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 7-4, 40 CFR 60, and/or 40 CFR 75.

D.1.4 Continuous Emission Monitoring System (CEMS) for CO [326 IAC 3-5]

- (a) Pursuant to 326 IAC 3-5-1(d) (Continuous Monitoring of Emissions), the Permittee shall install, calibrate, certify, operate, and maintain continuous emission monitoring system(s) (CEMS) and related equipment for measuring CO emissions rates in lbs/hr from stack 1 through 3, in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.
- (b) The continuous emissions monitoring system(s) (CEMS) for CO emission rate shall be operated at all times the emissions unit or process is operating except for reasonable periods of monitor system downtime due to necessary calibration, maintenance activities or malfunctions. Calibration and maintenance activities shall be conducted pursuant to the standard operating procedures under 326 IAC 3-5-4(a) [326 IAC 2-7-5(3)(A)(iii)] [326 IAC 3-5].
- (c) CO CEMS required by this permit shall meet all applicable performance specifications of 40 CFR 60 or any other applicable performance specifications, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3.
- (d) In the event that a breakdown of CO continuous emission monitoring system required by this permit occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (e) Whenever a CO CEM is down for more than twenty-four (24) hours, the Permittee shall follow good air pollution control practices.
- (f) Whenever the CO CEMS is malfunctioning or down for repair or adjustments, the Permittee shall use a data substitution procedure for CO ppm that is consistent with the requirements of 40 CFR Part 75.33(b), Standard Missing Data Substitution Procedure for SO2 Concentration Data.
- (g) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 7-4, 40 CFR 60, and/or 40 CFR 75.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirement

(a) To document the compliance status with Conditions D.1.1(a) and D.1.1(b), the Permittee shall maintain records required under 326 IAC 3-5-6 available at the source in a manner so that they may be inspected by the IDEM, OAQ, or the U.S. EPA, if so requested or required.

Duke Energy Indiana, Inc. - Henry Generating Station Page 27 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.1.6 Reporting Requirement

A quarterly report of the information to document the compliance status with Conditions D.1.1(a) and D.1.1(b) shall be submitted not later than thirty (30) days following the end of each calendar quarter. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2 and Unit 3, installed in November 1999, equipped with water-injection for NO_X control and continuous emission monitoring system (CEMs) for NOX and CO emissions, exhausting to stacks 1 through 3, nominally rated at 407.8 million British thermal units, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- E.1.1 General Provision Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR 60, Subpart A]
 - (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A General Provisions, which are incorporated by reference as 326 IAC 12-1 for the three (3) combustion turbines, identified as Unit 1, Unit 2 and Unit 3 except as otherwise specified in 40 CFR Part 60, Subpart GG.
- E.1.2 Standard of Performance for Stationary Gas Turbines [326 IAC 12-1] [40 CFR 60, Subpart GG]

Pursuant to 40 CFR 60 Subpart GG, the Permittee shall comply with the provisions of Standard of Performance for Stationary Gas Turbines the three (3) combustion turbines as specified as follows:

- (1) 40 CFR 60.330
- (2) 40 CFR 60.331
- (3) 40 CFR 60.332
- (4) 40 CFR 60.333
- (5) 40 CFR 60.334
- (6) 40 CFR 60.335

SECTION E.2

EMISSION UNITS OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2 and Unit 3, installed in November 1999, equipped with water-injection for NO_X control and continuous emission monitoring system (CEMs) for NOX and CO emissions, exhausting to stacks 1 through 3, nominally rated at 407.8 million British thermal units, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Acid Rain Program

E.2.2 Acid Rain Permit [326 IAC 2-7-5(1)(C)] [326 IAC 21] [40 CFR 72 through 40 CFR 78]

- (a) Pursuant to 326 IAC 21 (Acid Deposition Control), the Permittee shall comply with all provisions of the Acid Rain permit issued for this source, and any other applicable requirements contained in 40 CFR 72 through 40 CFR 78.
- (b) The Acid Rain permit for this source is attached to this permit as Appendix A, and is incorporated by reference.

E.2.2 Title IV Emissions Allowances [326 IAC 2-7-5(4)] [326 IAC 21]

Emissions exceeding any allowances that the Permittee lawfully holds under the Title IV Acid Rain Program of the Clean Air Act are prohibited, subject to the following limitations:

- (a) No revision of this permit shall be required for increases in emissions that are authorized by allowances acquired under the Title IV Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.
- (b) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- (c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act.

Duke Energy Indiana, Inc. - Henry Generating Station

New Castle, Indiana T065-32753-00032 Permit Reviewer: Muhammad D. Khan

Page 30 of 43

SECTION G Clean Air Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs - CAIR Permit for CAIR Units

Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)

ORIS Code: 7763

CAIR Permit for CAIR Units Under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a)

(a) Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2 and Unit 3, installed in November 1999, equipped with water-injection for NO_x control and continuous emission monitoring system (CEMs) for NOX and CO emissions, exhausting to stacks 1 through 3, nominally rated at 407.8 million British thermal units, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

G.1 Automatic Incorporation of Definitions [326 IAC 24-1-7(e)] [326 IAC 24-2-7(e)] [326 IAC 24-3-7(e)] [40 CFR 97.123(b)] [40 CFR 97.223(b)] [40 CFR 97.323(b)]

This CAIR permit is deemed to incorporate automatically the definitions of terms under 326 IAC 24-1-2, 326 IAC 24-2-2, and 326 IAC 24-3-2.

- G.2 Standard Permit Requirements [326 IAC 24-1-4(a)] [326 IAC 24-2-4(a)] [326 IAC 24-3-4(a)] [40 CFR 97.106(a)] [40 CFR 97.206(a)] [40 CFR 97.306(a)]
 - The owners and operators of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall operate each source and unit in compliance with this CAIR permit.
 - (b) The CAIR NO_x units, CAIR SO₂ units and CAIR NO_x ozone season units subject to this CAIR permit are Unit 1. Unit 2 and Unit 3.
- G.3 Monitoring, Reporting, and Record Keeping Requirements [326 IAC 24-1-4(b)] [326 IAC 24-2-4(b)] [326 IAC 24-3-4(b)] [40 CFR 97.106(b)] [40 CFR 97.206(b)] [40 CFR 97.306(b)]
 - The owners and operators, and the CAIR designated representative, of each CAIR NO_X (a) source, CAIR SO₂ source, and CAIR NO_x ozone season source and CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_X ozone season unit at the source shall comply with the applicable monitoring, reporting, and record keeping requirements of 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.
 - (b) The emissions measurements recorded and reported in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 shall be used to determine compliance by each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source with the CAIR NO_X emissions limitation under 326 IAC 24-1-4(c), CAIR SO₂ emissions limitation under 326 IAC 24-2-4(c), and CAIR NO_x ozone season emissions limitation under 326 IAC 24-3-4(c) and Condition G.4.1, Nitrogen Oxides Emission Requirements, Condition G.4.2, Sulfur Dioxide Emission Requirements, and Condition G.4.3. Nitrogen Oxides Ozone Season Emission Requirements.
- G.4.1 Nitrogen Oxides Emission Requirements [326 IAC 24-1-4(c)] [40 CFR 97.106(c)]
 - (a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 326 IAC 24-1-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 326 IAC 24-1-11.

Duke Energy Indiana, Inc. - Henry Generating Station Page 31 of 43
New Castle, Indiana T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(b) A CAIR NO_X unit shall be subject to the requirements under 326 IAC 24-1-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-1-4(c)(2), and for each control period thereafter.

- (c) A CAIR NO_X allowance shall not be deducted for compliance with the requirements under 326 IAC 24-1-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.
- (d) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X allowance tracking system accounts in accordance with 326 IAC 24-1-9, 326 IAC 24-1-10, and 326 IAC 24-1-12.
- (e) A CAIR NO_X allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X annual trading program. No provision of the CAIR NO_X annual trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-1-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR NO_X allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-1-8, 326 IAC 24-1-9, 326 IAC 24-1-10, or 326 IAC 24-1-12, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in this CAIR permit.

G.4.2 Sulfur Dioxide Emission Requirements [326 IAC 24-2-4(c)] [40 CFR 97.206(c)]

- (a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period under 326 IAC 24-2-8(j) and 326 IAC 24-2-8(k) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with 326 IAC 24-2-10.
- (b) A CAIR SO₂ unit shall be subject to the requirements under 326 IAC 24-2-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-2-4(c)(2), and for each control period thereafter.
- (c) A CAIR SO₂ allowance shall not be deducted for compliance with the requirements under 326 IAC 24-2-4(c)(1), for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (d) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ allowance tracking system accounts in accordance with 326 IAC 24-2-8, 326 IAC 24-2-9, and 326 IAC 24-2-11.
- (e) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ trading program. No provision of the CAIR SO₂ trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-2-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR SO₂ allowance does not constitute a property right.

(g) Upon recordation by the U.S. EPA under 326 IAC 24-2-8, 326 IAC 24-2-9, or 326 IAC 24-2-11, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in this CAIR permit.

G.4.3 Nitrogen Oxides Ozone Season Emission Requirements [326 IAC 24-3-4(c)] [40 CFR 97.306(c)]

- (a) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X ozone season source and each CAIR NO_X ozone season unit at the source shall hold, in the source's compliance account, CAIR NO_X ozone season allowances available for compliance deductions for the control period under 326 IAC 24-3-9(i) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X ozone season units at the source, as determined in accordance with 326 IAC 24-3-11.
- (b) A CAIR NO_X ozone season unit shall be subject to the requirements under 326 IAC 24-3-4(c)(1) for the control period starting on the applicable date, as determined under 326 IAC 24-3-4(c)(2), and for each control period thereafter.
- (c) A CAIR NO_X ozone season allowance shall not be deducted for compliance with the requirements under 326 IAC 24-3-4(c)(1), for a control period in a calendar year before the year for which the CAIR NO_X ozone season allowance was allocated.
- (d) CAIR NO_X ozone season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X ozone season allowance tracking system accounts in accordance with 326 IAC 24-3-9, 326 IAC 24-3-10, and 326 IAC 24-3-12.
- (e) A CAIR NO_X ozone season allowance is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the CAIR NO_X ozone season trading program. No provision of the CAIR NO_X ozone season trading program, the CAIR permit application, the CAIR permit, or an exemption under 326 IAC 24-3-3 and no provision of law shall be construed to limit the authority of the State of Indiana or the United States to terminate or limit the authorization.
- (f) A CAIR NO_X ozone season allowance does not constitute a property right.
- (g) Upon recordation by the U.S. EPA under 326 IAC 24-3-8, 326 IAC 24-3-9, 326 IAC 24-3-10, or 326 IAC 24-3-12, every allocation, transfer, or deduction of a CAIR NO_X ozone season allowance to or from a CAIR NO_X ozone season source's compliance account is incorporated automatically in this CAIR permit.
- G.5 Excess Emissions Requirements [326 IAC 24-1-4(d)] [326 IAC 24-2-4(d)] [326 IAC 24-3-4(d)] [40 CFR 97.106(d)] [40 CFR 97.206(d)] [40 CFR 97.306(d)]
 - (a) The owners and operators of a CAIR NO_X source and each CAIR NO_X unit that emits nitrogen oxides during any control period in excess of the CAIR NO_X emissions limitation shall do the following:
 - (1) Surrender the CAIR NO_X allowances required for deduction under 326 IAC 24-1-9(j)(4).
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-1-4, the Clean Air Act (CAA), and applicable state law.

(b) The owners and operators of a CAIR SO₂ source and each CAIR SO₂ unit that emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation shall do the following:

- (1) Surrender the CAIR SO₂ allowances required for deduction under 326 IAC 24-2-8(k)(4).
- (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Page 33 of 43

T065-32753-00032

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-2-4, the Clean Air Act (CAA), and applicable state law.

- (c) The owners and operators of a CAIR NO_X ozone season source and each CAIR NO_X ozone season unit that emits nitrogen oxides during any control period in excess of the CAIR NO_X ozone season emissions limitation shall do the following:
 - (1) Surrender the CAIR NO_X ozone season allowances required for deduction under 326 IAC 24-3-9(j)(4).
 - (2) Pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, the Clean Air Act (CAA) or applicable state law.

Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 326 IAC 24-3-4, the Clean Air Act (CAA), and applicable state law.

G.6 Record Keeping Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [326 IAC 2-7-5(3)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]

Unless otherwise provided, the owners and operators of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall keep on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years from the date the document was created:

- (a) The certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation. The certificate and documents shall be retained on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond such five (5) year period until such documents are superseded because of the submission of a new account certificate of representation under 326 IAC 24-1-6(h), 326 IAC 24-2-6(h), and 326 IAC 24-3-6(h) changing the CAIR designated representative.
- (b) All emissions monitoring information, in accordance with 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11, provided that to the extent that 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11 provides for a three (3) year period for record keeping, the three (3) year period shall apply.
- (c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X annual trading program, CAIR SO₂ trading program, and CAIR NO_X ozone season trading program.

(d) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program or to demonstrate compliance with the requirements of the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR SO_3 ozone season trading program.

This period may be extended for cause, at any time before the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

- G.7 Reporting Requirements [326 IAC 24-1-4(e)] [326 IAC 24-2-4(e)] [326 IAC 24-3-4(e)] [40 CFR 97.106(e)] [40 CFR 97.206(e)] [40 CFR 97.306(e)]
 - (a) The CAIR designated representative of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X ozone season source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X ozone season unit at the source shall submit the reports required under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program, including those under 326 IAC 24-1-11, 326 IAC 24-2-10, and 326 IAC 24-3-11.
 - (b) Pursuant to 326 IAC 24-1-4(e), 326 IAC 24-2-4(e), and 326 IAC 24-3-4(e) and 326 IAC 24-1-6(e)(1), 326 IAC 24-2-6(e)(1), and 326 IAC 24-3-6(e)(1), each submission under the CAIR NO_X annual trading program, CAIR SO_2 trading program, and CAIR NO_X ozone season trading program shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
 - (c) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to IDEM, OAQ, the information shall be submitted to:

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality 100 North Senate Avenue MC 61-53, IGCN 1003 Indianapolis, Indiana 46204-2251

(d) Where 326 IAC 24-1, 326 IAC 24-2, and 326 IAC 24-3 requires a submission to U.S. EPA, the information shall be submitted to:

U.S. Environmental Protection Agency Clean Air Markets Division 1200 Pennsylvania Avenue, NW Mail Code 6204N Washington, DC 20460

G.8 Liability [326 IAC 24-1-4(f)] [326 IAC 24-2-4(f)] [326 IAC 24-3-4(f)] [40 CFR 97.106(f)] [40 CFR 97.206(f)] [40 CFR 97.306(f)]

The owners and operators of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall be liable as follows:

Page 35 of 43

- (a) Each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall meet the requirements of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_X ozone season trading program, respectively.
- (b) Any provision of the CAIR NO_X annual trading program, CAIR SO₂ trading program, and CAIR NO_X ozone season trading program that applies to a CAIR NO_X source, CAIR SO₂ source, and CAIR NO_x ozone season source or the CAIR designated representative of a CAIR NO_X source, CAIR SO₂ source, and CAIR NO_X ozone season source shall also apply to the owners and operators of such source and of the CAIR NO_x units, CAIR SO₂ units, and CAIR NO_x ozone season units at the source.
- (c) Any provision of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program that applies to a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_X ozone season unit or the CAIR designated representative of a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit shall also apply to the owners and operators of such unit.
- G.9 Effect on Other Authorities [326 IAC 24-1-4(g)] [326 IAC 24-2-4(g)] [326 IAC 24-3-4(g)] [40 CFR 97.106(g)] [40 CFR 97.206(g)] [40 CFR 97.306(g)]

No provision of the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program, a CAIR permit application, a CAIR permit, or an exemption under 326 IAC 24-1-3, 326 IAC 24-2-3, and 326 IAC 24-3-3 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x ozone season source or CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act (CAA).

CAIR Designated Representative and Alternate CAIR Designated Representative [326 IAC 24-1-6] [326 IAC 24-2-6] [326 IAC 24-3-6] [40 CFR 97, Subpart BB] [40 CFR 97, Subpart BBB] [40 CFR 97, Subpart BBBB]

Pursuant to 326 IAC 24-1-6, 326 IAC 24-2-6, and 326 IAC 24-3-6:

- Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and (a) 326 IAC 24-3-6(f)(3), each CAIR NO_X source, CAIR SO₂ source, and CAIR NO_X ozone season source, including all CAIR NO_X units, CAIR SO₂ units, and CAIR NO_X ozone season units at the source, shall have one (1) and only one (1) CAIR designated representative, with regard to all matters under the CAIR NO_x annual trading program, CAIR SO₂ trading program, and CAIR NO_x ozone season trading program concerning the source or any CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x ozone season unit at the source.
- (b) The provisions of 326 IAC 24-1-6(f), 326 IAC 24-2-6(f), and 326 IAC 24-3-6(f) shall apply where the owners or operators of a CAIR NO_X source, CAIR SO₂ source, and CAIR NO_X ozone season source choose to designate an alternate CAIR designated representative.

Duke Energy Indiana, Inc. - Henry Generating Station

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Page 36 of 43 T065-32753-00032

Except as specified in 326 IAC 24-1-6(f)(3), 326 IAC 24-2-6(f)(3), and 326 IAC 24-3-6(f)(3), whenever the term "CAIR designated representative" is used, the term shall be construed to include the CAIR designated representative or any alternate CAIR designated representative.

Page 37 of 43 T065-32753-00032

Duke Energy Indiana, Inc. - Henry Generating Station New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Duke Energy Indiana, Inc. - Henry Generating Station Source Address: 6045 West State Road 38, New Castle, Indiana 47362

Part 70 Permit No.: T065-32753-00032

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
□ Annual Compliance Certification Letter
☐ Test Result (specify)
□ Report (specify)
□ Notification (specify)
☐ Affidavit (specify)
□ Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Phone:
Date:

Duke Energy Indiana, Inc. - Henry Generating Station

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Page 38 of 43 T065-32753-00032

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH

100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 Phone: (317) 233-0178 Fax: (317) 233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Duke Energy Indiana, Inc. - Henry Generating Station Source Address: Duke Energy Indiana, Inc. - Henry Generating Station 6045 West State Road 38, New Castle, Indiana 47362

Part 70 Permit No.: T065-32753-00032

This form	consists of	of 2 pages
-----------	-------------	------------

Page 1 of 2

- ☐ This is an emergency as defined in 326 IAC 2-7-1(12)
 - The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

Duke Energy Indiana, Inc. - Henry Generating Station New Castle, Indiana Permit Reviewer: Muhammad D. Khan

Page 39 of 43 T065-32753-00032

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency?	Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilitie imminent injury to persons, severe damage to equipment, substantial loss of product or raw materials of substantial economic value:	
Form Completed by:	
Title / Position:	
Date:	
Phone:	

Duke Energy Indiana, Inc. - Henry Generating Station

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	Duke Energy Indiana, Inc Henry Generating Station
Source Address:	6045 West State Road 38, New Castle, Indiana 47362

Part 70 Permit No.: T065-32753-00032

Facility: Three Combustion Turbines (Unit #1, 2 & 3)

Parameter: NOx Emissions

Limit: Total less than 249.7 tons per twelve (12) consecutive month period with

compliance determined at the end of each month. Compliance shall be based on

the CEMS data.

QUARTER: YEAR:

	Column 1	Column 2	Column 1 + Column 2
Month			
	NOx	NOx Emissions	NOx Emissions
	Emissions	Previous 11	12 Month Total
			12 Month Total
	This Month	Months	
Month 1			
Month 2			
WOTHT			
Month 3			

□ No deviation	occurred in this quarter.
	ccurred in this quarter. s been reported on:
Submitted by:	
Title / Position:	
Signature:	
Date:	
Phone:	

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	Duke Energy Indiana, Inc Henry Generating Station
Source Address:	6045 West State Road 38, New Castle, Indiana 47362

Part 70 Permit No.: T065-32753-00032

Facility: Three Combustion Turbines (Unit #1, 2 & 3)

Parameter: CO Emissions

Limit: Total less than 249.8 tons per twelve (12) consecutive month period with

compliance determined at the end of each month. Compliance shall be based on

the CEMS data.

QUARTER: YEAR:

	Column 1	Column 2	Column 1 + Column 2
Month	CO Emissions This Month	CO Emissions Previous 11 Months	CO Emissions 12 Month Total
Month 1			
Month 2			
Month 3			

□ No deviation	occurred in this quarter.	
	occurred in this quarter. s been reported on:	
Submitted by:		
Title / Position:		
Signature:		
Date:		
Phone:		

Duke Energy Indiana, Inc. - Henry Generating Station

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Response Steps Taken:

Page 42 of 43 T065-32753-00032

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Duke Energy Indiana, Inc. - Henry Generating Station Source Address: 6045 West State Road 38. New Castle, Indiana 47362 Part 70 Permit No.: T065-32753-00032 Months: _____ to ____ Year: Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". ☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. ☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations:** Probable Cause of Deviation: Response Steps Taken: **Permit Requirement** (specify permit condition #) **Duration of Deviation:** Date of Deviation: **Number of Deviations:** Probable Cause of Deviation:

Page 2 of 2

	. ago = o. =
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed by:	
Title / Position:	
Date:	
Phone:	

Attachment A to a Part 70 Operating Permit

40 CFR 60, Subpart GG—Standards of Performance for Stationary Gas Turbines

Source Background and Description

Source Name: Duke Energy Indiana, Inc. Henry County

Generating Station

Source Location: 6045 West State Road 38 New Castle, IN 47362

County: Henry SIC Code: 4911

Operation Permit No.: T 065-32753-00032 **Permit Reviewer:** Muhammad D. Khan

Emission Units Three (3) combustion turbines

Section E.1 of the Permit identifies the applicable section of this rule

Subpart GG—Standards of Performance for Stationary Gas Turbines

§ 60.330 Applicability and designation of affected facility.

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired.
- (b) Any facility under paragraph (a) of this section which commences construction, modification, or reconstruction after October 3, 1977, is subject to the requirements of this part except as provided in paragraphs (e) and (j) of §60.332.

[44 FR 52798, Sept. 10, 1979, as amended at 52 FR 42434, Nov. 5, 1987; 65 FR 61759, Oct. 17, 2000]

§ 60.331 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (a) Stationary gas turbine means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system that is not self propelled. It may, however, be mounted on a vehicle for portability.
- (b) Simple cycle gas turbine means any stationary gas turbine which does not recover heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine, or which does not recover heat from the gas turbine exhaust gases to heat water or generate steam.
- (c) Regenerative cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to preheat the inlet combustion air to the gas turbine.

Duke Energy Indiana, Inc Henry County Gen. Station Page 2 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(d) Combined cycle gas turbine means any stationary gas turbine which recovers heat from the gas turbine exhaust gases to heat water or generate steam.

- (e) *Emergency gas turbine* means any stationary gas turbine which operates as a mechanical or electrical power source only when the primary power source for a facility has been rendered inoperable by an emergency situation.
- (f) Ice fog means an atmospheric suspension of highly reflective ice crystals.
- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (h) Efficiency means the gas turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output based on the lower heating value of the fuel.
- (i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) Base load means the load level at which a gas turbine is normally operated.
- (k) Fire-fighting turbine means any stationary gas turbine that is used solely to pump water for extinguishing fires.
- (I) Turbines employed in oil/gas production or oil/gas transportation means any stationary gas turbine used to provide power to extract crude oil/natural gas from the earth or to move crude oil/natural gas, or products refined from these substances through pipelines.
- (m) A Metropolitan Statistical Area or MSA as defined by the Department of Commerce.
- (n) Offshore platform gas turbines means any stationary gas turbine located on a platform in an ocean.
- (o) Garrison facility means any permanent military installation.
- (p) Gas turbine model means a group of gas turbines having the same nominal air flow, combuster inlet pressure, combuster inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.
- (q) Electric utility stationary gas turbine means any stationary gas turbine constructed for the purpose of supplying more than one-third of its potential electric output capacity to any utility power distribution system for sale.
- (r) *Emergency fuel* is a fuel fired by a gas turbine only during circumstances, such as natural gas supply curtailment or breakdown of delivery system, that make it impossible to fire natural gas in the gas turbine.
- (s) *Unit operating hour* means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.
- (t) Excess emissions means a specified averaging period over which either:
- (1) The NO_xemissions are higher than the applicable emission limit in §60.332;
- (2) The total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §60.333; or
- (3) The recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.

Duke Energy Indiana, Inc Henry County Gen. Station Attachment A No.: T065-32753-00032 New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

(u) Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur. 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

Page 3 of 14

- (v) Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.
- (w) Lean premix stationary combustion turbine means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture for combustion in the combustor. Mixing may occur before or in the combustion chamber. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (x) Diffusion flame stationary combustion turbine means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition. A unit which is capable of operating in both lean premix and diffusion flame modes is considered a lean premix stationary combustion turbine when it is in the lean premix mode, and it is considered a diffusion flame stationary combustion turbine when it is in the diffusion flame mode.
- (y) Unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24hour period.

144 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

§ 60.332 Standard for nitrogen oxides.

- (a) On and after the date on which the performance test required by §60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (b), (c), and (d) of this section shall comply with one of the following, except as provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of this section.
- (1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_Xemission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kiloioules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

Duke Energy Indiana, Inc Henry County Gen. Station New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Page 4 of 14 Attachment A No.: T065-32753-00032

 $F = NO_x$ emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

(2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{\left(14.4\right)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in §60.335(b)(1)) NO_xemission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

 $F = NO_X$ emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of this section.

- (3) The use of F in paragraphs (a)(1) and (2) of this section is optional. That is, the owner or operator may choose to apply a NO_X allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a)(4) of this section or may accept an F-value of zero.
- (4) If the owner or operator elects to apply a NO_xemission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under §60.8 as follows:

Fuel-bound nitrogen (percent by weight)	F (NO _x percent by volume)
$N \le .015$	0
0.015 < N≤ 0.1	0.04 (N)
$0.1 < N \le 0.25$	0.004+0.0067(N-0.1)
N > 0.25	0.005

Where:

N = the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by §60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in theFederal Register.

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

Duke Energy Indiana, Inc Henry County Gen. Station Page 5 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

- (d) Stationary gas turbines with a manufacturer's rated base load at ISO conditions of 30 megawatts or less except as provided in §60.332(b) shall comply with paragraph (a)(2) of this section.
- (e) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired and that have commenced construction prior to October 3, 1982 are exempt from paragraph (a) of this section.
- (f) Stationary gas turbines using water or steam injection for control of NO_xemissions are exempt from paragraph (a) when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.
- (g) Emergency gas turbines, military gas turbines for use in other than a garrison facility, military gas turbines installed for use as military training facilities, and fire fighting gas turbines are exempt from paragraph (a) of this section.
- (h) Stationary gas turbines engaged by manufacturers in research and development of equipment for both gas turbine emission control techniques and gas turbine efficiency improvements are exempt from paragraph (a) on a case-by-case basis as determined by the Administrator.
- (i) Exemptions from the requirements of paragraph (a) of this section will be granted on a case-by-case basis as determined by the Administrator in specific geographical areas where mandatory water restrictions are required by governmental agencies because of drought conditions. These exemptions will be allowed only while the mandatory water restrictions are in effect.
- (j) Stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour that commenced construction, modification, or reconstruction between the dates of October 3, 1977, and January 27, 1982, and were required in the September 10, 1979, Federal Register (44 FR 52792) to comply with paragraph (a)(1) of this section, except electric utility stationary gas turbines, are exempt from paragraph (a) of this section.
- (k) Stationary gas turbines with a heat input greater than or equal to 10.7 gigajoules per hour (10 million Btu/hour) when fired with natural gas are exempt from paragraph (a)(2) of this section when being fired with an emergency fuel.
- (I) Regenerative cycle gas turbines with a heat input less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) are exempt from paragraph (a) of this section.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41359, July 8, 2004]

§ 60.333 Standard for sulfur dioxide.

On and after the date on which the performance test required to be conducted by §60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions:

- (a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.
- (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

[44 FR 52798, Sept. 10, 1979, as amended at 69 FR 41360, July 8, 2004]

Duke Energy Indiana, Inc Henry County Gen. Station New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Page 6 of 14 Attachment A No.: T065-32753-00032

§ 60.334 Monitoring of operations.

- (a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO_Xemissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.
- (b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO_X emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_X and O_2 monitors. As an alternative, a CO_2 monitor may be used to adjust the measured NO_X concentrations to 15 percent O_2 by either converting the CO_2 hourly averages to equivalent O_2 concentrations using Equation F–14a or F–14b in appendix F to part 75 of this chapter and making the adjustments to 15 percent O_2 , or by using the CO_2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as follows:
- (1) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR part 60, appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_xand diluent monitors may be performed individually or on a combined basis, *i.e.*, the relative accuracy tests of the CEMS may be performed either:
- (i) On a ppm basis (for NO_X) and a percent O₂basis for oxygen; or
- (ii) On a ppm at 15 percent O2basis; or
- (iii) On a ppm basis (for NO_X) and a percent CO₂basis (for a CO₂monitor that uses the procedures in Method 20 to correct the NO_Xdata to 15 percent O₂).
- (2) As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
- (3) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in §60.13(h).
- (i) For each unit operating hour in which a valid hourly average, as described in paragraph (b)(2) of this section, is obtained for both NO_X and diluent, the data acquisition and handling system must calculate and record the hourly NO_X emissions in the units of the applicable NO_X emission standard under §60.332(a), *i.e.*, percent NO_X by volume, dry basis, corrected to 15 percent NO_X and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average NO_X a diluent cap value of 19.0 percent NO_X be used in the emission calculations.
- (ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation.
- (iii) If the owner or operator has installed a NO_XCEMS to meet the requirements of part 75 of this chapter, and is continuing to meet the ongoing requirements of part 75 of this chapter, the CEMS may be used to meet the

Duke Energy Indiana, Inc Henry County Gen. Station Page 7 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

requirements of this section, except that the missing data substitution methodology provided for at 40 CFR part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c).

- (c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_Xemissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NO_Xemission limit under §60.332, that approved procedure may continue to be used.
- (d) The owner or operator of any new turbine constructed after July 8, 2004, and which uses water or steam injection to control NO_xemissions may elect to use either the requirements in paragraph (a) of this section for continuous water or steam to fuel ratio monitoring or may use a NO_xCEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section.
- (e) The owner or operator of any new turbine that commences construction after July 8, 2004, and which does not use water or steam injection to control NO_X emissions, may, but is not required to, elect to use a NO_X CEMS installed, certified, operated, maintained, and quality-assured as described in paragraph (b) of this section. Other acceptable monitoring approaches include periodic testing approved by EPA or the State or local permitting authority or continuous parameter monitoring as described in paragraph (f) of this section.
- (f) The owner or operator of a new turbine that commences construction after July 8, 2004, which does not use water or steam injection to control NO_Xemissions may, but is not required to, perform continuous parameter monitoring as follows:
- (1) For a diffusion flame turbine without add-on selective catalytic reduction controls (SCR), the owner or operator shall define at least four parameters indicative of the unit's NO_xformation characteristics and shall monitor these parameters continuously.
- (2) For any lean premix stationary combustion turbine, the owner or operator shall continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_xmode.
- (3) For any turbine that uses SCR to reduce NO_xemissions, the owner or operator shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.
- (4) For affected units that are also regulated under part 75 of this chapter, if the owner or operator elects to monitor NO_xemission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §75.19 of this chapter, the requirements of this paragraph (f) may be met by performing the parametric monitoring described in section 2.3 of appendix E or in §75.19(c)(1)(iv)(H) of this chapter.
- (g) The steam or water to fuel ratio or other parameters that are continuously monitored as described in paragraphs (a), (d) or (f) of this section shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOxemission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in §75.19 of this chapter or the NOxemission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in §75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.
- (h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

Duke Energy Indiana, Inc Henry County Gen. Station Page 8 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084–82, 94, D5504–01, D6228–98, or Gas Processors Association Standard 2377–86 (all of which are incorporated by reference-see §60.17), which measure the major sulfur compounds may be used; and

- (2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (*i.e.* , if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
- (3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.
- (4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.
- (i) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:
- (1) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e. , flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day.
- (2) Gaseous fuel. Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day. For owners and operators that elect not to demonstrate sulfur content using options in paragraph (h)(3) of this section, and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined and recorded once per unit operating day.
- (3) Custom schedules. Notwithstanding the requirements of paragraph (i)(2) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (i)(3)(i) and (i)(3)(ii) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.333.
- (i) The two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of this section are acceptable, without prior Administrative approval:
- (A) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (i)(3)(i)(B), (C), or (D) of this section, as applicable.

Duke Energy Indiana, Inc Henry County Gen. Station Page 9 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(B) If none of the 30 daily measurements of the fuel's total sulfur content exceeds 0.4 weight percent (4000 ppmw), subsequent sulfur content monitoring may be performed at 12 month intervals. If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in paragraph (i)(3)(i)(C) of this section. If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section.

- (C) If at least one of the 30 daily measurements of the fuel's total sulfur content is between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), but none exceeds 0.8 weight percent (8000 ppmw), then:
- (1) Collect and analyze a sample every 30 days for three months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(2) of this section.
- (2) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, follow the procedures in paragraph (i)(3)(i)(C)(3) of this section.
- (3) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in paragraph (i)(3)(i)(D) of this section. Otherwise, continue to monitor at this frequency.
- (D) If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring according to paragraph (i)(3)(i)(A) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained. At that point, the applicable procedures of paragraph (i)(3)(i)(B) or (C) of this section shall be followed.
- (ii) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:
- (A) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf (*i.e.*, the maximum total sulfur content of natural gas as defined in §60.331(u)), no additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.
- (B) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds 0.4 weight percent (4000 ppmw), then the minimum required sampling frequency shall be one sample at 12 month intervals.
- (C) If any sample result exceeds 0.4 weight percent sulfur (4000 ppmw), but none exceeds 0.8 weight percent sulfur (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(C) of this section.
- (D) If the sulfur content of any of the 720 hourly samples exceeds 0.8 weight percent (8000 ppmw), follow the provisions of paragraph (i)(3)(i)(D) of this section.
- (j) For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
- (1) Nitrogen oxides.
- (i) For turbines using water or steam to fuel ratio monitoring:
- (A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with §60.332, as established during the performance test required in §60.8. Any unit operating hour in which no water or steam is injected into the turbine shall also be considered an excess emission.

Duke Energy Indiana, Inc Henry County Gen. Station Page 10 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

- (C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).
- (ii) If the owner or operator elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in paragraphs (j)(1)(ii)(A) and (B) of this section.
- (A) An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in §60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value.
- (B) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.
- (iii) For turbines using NO_xand diluent CEMS:
- (A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_X concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NO_X concentration" is the arithmetic average of the average NO_X concentration measured by the CEMS for a given hour (corrected to 15 percent O_2 and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NO_X concentrations immediately preceding that unit operating hour.
- (B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_xconcentration or diluent (or both).
- (C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).
- (iv) For owners or operators that elect, under paragraph (f) of this section, to monitor combustion parameters or parameters that document proper operation of the NO_xemission controls:
- (A) An excess emission shall be a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.
- (B) A period of monitor downtime shall be a unit operating hour in which any of the required parametric data are either not recorded or are invalid.
- (2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:
- (i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

Duke Energy Indiana, Inc Henry County Gen. Station Page 11 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

- (iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.
- (3) *Ice fog.* Each period during which an exemption provided in §60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
- (4) *Emergency fuel.* Each period during which an exemption provided in §60.332(k) is in effect shall be included in the report required in §60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.
- (5) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period.

[44 FR 52798, Sept. 10, 1979, as amended at 47 FR 3770, Jan. 27, 1982; 65 FR 61759, Oct. 17, 2000; 69 FR 41360, July 8, 2004; 71 FR 9457, Feb. 24, 2006]

§ 60.335 Test methods and procedures.

- (a) The owner or operator shall conduct the performance tests required in §60.8, using either
- (1) EPA Method 20,
- (2) ASTM D6522-00 (incorporated by reference, see §60.17), or
- (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO_xand diluent concentration.
- (4) Sampling traverse points are to be selected following Method 20 or Method 1, (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.
- (5) Notwithstanding paragraph (a)(4) of this section, the owner or operator may test at few points than are specified in Method 1 or Method 20 if the following conditions are met:
- (i) You may perform a stratification test for NO_X and diluent pursuant to
- (A) [Reserved]
- (B) The procedures specified in section 6.5.6.1(a) through (e) appendix A to part 75 of this chapter.
- (ii) Once the stratification sampling is completed, the owner or operator may use the following alternative sample point selection criteria for the performance test:

Duke Energy Indiana, Inc Henry County Gen. Station Page 12 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

(A) If each of the individual traverse point NO_X concentrations, normalized to 15 percent O_2 , is within ± 10 percent of the mean normalized concentration for all traverse points, then you may use 3 points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The 3 points shall be located along the measurement line that exhibited the highest average normalized NO_X concentration during the stratification test; or

- (B) If each of the individual traverse point NO_X concentrations, normalized to 15 percent O_2 , is within ± 5 percent of the mean normalized concentration for all traverse points, then you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.
- (6) Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.
- (b) The owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in §60.332 and shall meet the performance test requirements of §60.8 as follows:
- (1) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{X_0}) corrected to 15 percent O_2 shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices:

 $NO_X = (NO_{Xo})(P_r/P_o)^{0.5}$ e19 (Ho-0.00633)(288°K/T_a)^{1.53}

Where:

 NO_X = emission concentration of NO_X at 15 percent O_2 and ISO standard ambient conditions, ppm by volume, dry basis,

NO_{xo}= mean observed NO_xconcentration, ppm by volume, dry basis, at 15 percent O₂,

P_r= reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hq.

P_o= observed combustor inlet absolute pressure at test, mm Hg,

H_o= observed humidity of ambient air, g H₂O/g air,

e = transcendental constant, 2.718, and

T_a= ambient temperature, °K.

- (2) The 3-run performance test required by §60.8 must be performed within ±5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in §60.331).
- (3) For a combined cycle turbine system with supplemental heat (duct burner), the owner or operator may elect to measure the turbine NO_X emissions after the duct burner rather than directly after the turbine. If the owner or operator elects to use this alternative sampling location, the applicable NO_X emission limit in §60.332 for the combustion turbine must still be met.
- (4) If water or steam injection is used to control NO_Xwith no additional post-combustion NO_Xcontrol and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with §60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522–00 (incorporated by reference, see

Duke Energy Indiana, Inc Henry County Gen. Station Page 13 of 14
New Castle, Indiana Attachment A No.: T065-32753-00032

Permit Reviewer: Muhammad D. Khan

§60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.332 NO_xemission limit.

- (5) If the owner operator elects to claim an emission allowance for fuel bound nitrogen as described in §60.332, then concurrently with each reference method run, a representative sample of the fuel used shall be collected and analyzed, following the applicable procedures described in §60.335(b)(9). These data shall be used to determine the maximum fuel nitrogen content for which the established water (or steam) to fuel ratio will be valid.
- (6) If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7) of this section) or as part of the initial performance test of the affected unit.
- (7) If the owner or operator elects to install and certify a NO_XCEMS under §60.334(e), then the initial performance test required under §60.8 may be done in the following alternative manner:
- (i) Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load.
- (ii) Use the test data both to demonstrate compliance with the applicable NO_xemission limit under §60.332 and to provide the required reference method data for the RATA of the CEMS described under §60.334(b).
- (iii) The requirement to test at three additional load levels is waived.
- (8) If the owner or operator elects under §60.334(f) to monitor combustion parameters or parameters indicative of proper operation of NO_Xemission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.334(g).
- (9) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the owner or operator may use equipment and procedures meeting the requirements of:
- (i) For liquid fuels, ASTM D2597–94 (Reapproved 1999), D6366–99, D4629–02, D5762–02 (all of which are incorporated by reference, $see \S 60.17$); or
- (ii) For gaseous fuels, shall use analytical methods and procedures that are accurate to within 5 percent of the instrument range and are approved by the Administrator.
- (10) If the owner or operator is required under §60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
- (i) For liquid fuels, ASTM D129–00, D2622–98, D4294–02, D1266–98, D5453–00 or D1552–01 (all of which are incorporated by reference, see §60.17); or
- (ii) For gaseous fuels, ASTM D1072–80, 90 (Reapproved 1994); D3246–81, 92, 96; D4468–85 (Reapproved 2000); or D6667–01 (all of which are incorporated by reference, see §60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.
- (11) The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.
- (c) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

Duke Energy Indiana, Inc Henry County Gen. Station New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

(1) Instead of using the equation in paragraph (b)(1) of this section, manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in §60.8 to ISO standard day conditions.

Page 14 of 14 Attachment A No.: T065-32753-00032

[69 FR 41363, July 8, 2004, as amended at 71 FR 9458, Feb. 24, 2006]

Browse Previous | Browse Next



Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue MC 61-53 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

PHASE II **ACID RAIN PERMIT RENEWAL** OFFICE OF AIR QUALITY

Duke Energy Indiana, Inc. – Henry County Generating Station 6045 West State Road 38 New Castle, Indiana 47362 **ORIS: 7763**

The owner and operator of this source (hereinafter known as the Permittee) are issued this permit under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Operation Permit No.: AR 065-21998-00032		
Issued by/Original Signed By:	Issuance Date: October 2, 2008	
Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Expiration Date: October 2, 2013	



Duke Energy Indiana, Inc. – Henry County Generating Station New Castle, Indiana

Permit Reviewer: Doug Wagner

Title IV Operating Conditions

Page 2 of 6

AR No. 065-21998-00032

Title IV Source Description:

Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2 and Unit 3, installed in November 1999, equipped with water-injection for NOx control, exhausting to stack 1, stack 2 and stack 3, respectively, nominally rated at 407.8 million British thermal units (MMBtu), each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4, IC 13-17-3-11, IC 13-17-8-1 and IC 13-17-8-2 as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application and opt-in information, in accordance with the deadlines in 40 CFR 72.30 and 40 CFR 74.
- (b) The Permittee shall operate Units 1, 2 and 3 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Units 1, 2, and 3 shall comply with the monitoring requirements as provided in 40 CFR 75.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 74, 75, and 76 shall be used to determine compliance by Units 1, 2 and 3, for sulfur dioxide under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants or other emissions characteristics at Units 1, 2 and 3 under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) The Permittee shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance sub account for Units 1, 2 and 3, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the units; and,
 - (2) Comply with the applicable acid rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Clean Air Act.
- (c) Units 1, 2 and 3 shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or,
 - (2) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).

Permit Reviewer: Doug Wagner

(d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

Page 3 of 6

AR No. 065-21998-00032

- (e) An allowance shall not be deducted in order to comply with the requirements under paragraph 4(a)(1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (f) Units 1, 2 and 3 were not allocated allowances by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 73.10. However, Units 1, 2 and 3 must still comply with the requirement to hold allowances to account for sulfur dioxide emissions under paragraph 4(a) and 326 IAC 21.
- (g) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the acid rain permit application, the acid rain permit, the acid rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (h) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.
- (i) No permit revision may be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program, provided that the increases do not require a permit revision under any other applicable requirement. [326 IAC 2-7-5(4)(A)]
- (j) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]
- Nitrogen Oxides Requirements [326 IAC 21]

Pursuant to 40 CFR 76, Acid Rain Nitrogen Oxides Emission Reduction Program, Units 1, 2 and 3 are not subject to the nitrogen oxide limitations set out in 40 CFR 76.

- 6. Excess Emissions Requirements [40 CFR 77] [326 IAC 21]
 - (a) The designated representative of Units 1, 2 and 3, if any unit has excess emissions of sulfur dioxide in any calendar year, shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.
 - (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management Air Compliance Section I, Office of Air Quality 100 North Senate Avenue, MC 61-53 Indianapolis, Indiana 46204-2251

and

Ms. Cecilia Mijares Air and Radiation Division U.S. Environmental Protection Agency, Region V 77 West Jackson Boulevard Chicago, IL 60604-3590

and

U.S. Environmental Protection Agency Clean Air Markets Division 1200 Pennsylvania Avenue, NW Permit Reviewer: Doug Wagner

Mail Code (6204N) Washington, DC 20460

- (c) The Permittee, if Units 1, 2 or 3 has excess emissions, as defined in 40 CFR 72.2, in any calendar year shall:
 - (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and.

Page 4 of 6

AR No. 065-21998-00032

(2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

7. Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, the Permittee shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
 - (1) The certificate of representation for the designated representative for Units 1, 2 and 3 and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (2) All emissions monitoring information collected in accordance with 40 CFR 75 shall be retained on site for 3 years;
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (b) The designated representative of Units 1, 2 and 3 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90 subpart I, 40 CFR 75, and 326 IAC 21. Submit required information to the appropriate authority(ies) as specified in 40 CFR 72.90 subpart I and 40 CFR 75.

8. Submissions [326 IAC 21]

- (a) The designated representative of Units 1, 2 and 3 shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.
- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management Permit Administration Section, Office of Air Quality 100 North Senate Avenue, MC 61-53 Indianapolis, Indiana 46204-2251

and

U.S. Environmental Protection Agency Clean Air Markets Division 1200 Pennsylvania Avenue, NW Mail Code (6204N) Washington, DC 20460 Duke Energy Indiana, Inc. – Henry County Generating Station Page 5 of 6
New Castle, Indiana AR No. 065-21998-00032

Permit Reviewer: Doug Wagner

(c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.

- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature, the following statements which shall be included verbatim in the submission:
 - (1) "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."; and,
 - "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (e) The designated representative of Units 1, 2 and 3 shall notify the Permittee:
 - (1) By the date of submission, of any Acid Rain Program submissions by the designated representative;
 - (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ; and,
 - (3) Provided that the submission or determination covers Units 1, 2 or 3.
- (f) The designated representative of Units 1, 2 and 3 shall provide the Permittee a copy of any submission or determination under condition (e) of this section, unless the Permittee expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

Invalidation of the acid rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit. [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)]

10. Liability [326 IAC 21]

- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to Section 113(c) of the Clean Air Act and shall be subject to enforcement by IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Clean Air Act, 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.
- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (d) Units 1, 2 and 3 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Units 1, 2 or 3, including a provision applicable to the designated representative of Units 1, 2 or 3, shall also apply to the Permittee.

Duke Energy Indiana, Inc. – Henry County Generating Station Page 6 of 6
New Castle, Indiana AR No. 065-21998-00032

Permit Reviewer: Doug Wagner

(f) Any provision of the Acid Rain Program that applies to Units 1, 2 or 3, including a provision applicable to the designated representative, shall also apply to the Permittee. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the Permittee and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(g) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by Units 1, 2 or 3 or by the Permittee or the designated representative shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the Permittee and, to the extent applicable, the designated representative of Units 1, 2 or 3 from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;
- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791(a) et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Description and Location

Source Name: Duke Energy Indiana, Inc. - Henry Generating Station Source Location: 6045 West State Road 38, New Castle, Indiana 47362

County: Henry SIC Code: 4911

Operation Permit Renewal No.: T065-32753-00032
Permit Reviewer: Muhammad D. Khan

Public Notice Information

On March 30, 2013, the Office of Air Quality (OAQ) had a notice published in the Courier Times, New Castle, Indiana, stating that Duke Energy Indiana, Inc. - Henry Generating Station had applied for a Part 70 Operating Permit Renewal to operate a stationary electric utility generating station. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments Received from Public and IDEM's Responses

No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflects the permit that was on public notice. Changes that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result, ensuring that these types of concerns are documented and part of the record regarding this permit decision.

IDEM has summarized and consolidated comments received during the public notice period. Comments dealing with a similar issue were grouped and IDEM provided a response on the issue in question.

The people commented during the public notice period is Susan Stoots.

Comment #1: How some conditions from previously issued permits/approvals have been corrected, changed or removed.

Response #1: There are four changes in the draft permit no T065-32753-00032 as follows:

- Section A.4 is added to the draft permit and it lists all insignificant activities
 present at the source but not specifically regulated by any state or federal rule.
 These activities were also mentioned in the old TSD but not in the permit and its
 IDEM practice to include all insignificant activities that are not regulated by any
 rule under this section.
- 2. There are few model changes in section B and C and these are the changes that IDEM has made to clarify the rules. These changes have been done in all the permits. These are standard conditions.

Page 2 of 2 T065-32753-00032 New Castle, Indiana Permit Reviewer: Muhammad D. Khan

- 3. Condition D.1.3 is divided in to two parts (D.1.3 and D.1.4) to clarify the requirements of CEMS for NOX and CO during downtime or malfunctioning of CEMS.
- 4. Section F of the old permit (Nitrogen Oxides Budget Trading Program 326 IAC 10-14) is not included in this permit. This Rule 326 IAC 10-14 is no longer in force now. CAIR rule has replaced this rule.

IDEM Contact

Questions regarding this proposed permit can be directed to:

Muhammad D. Khan Indiana Department Environmental Management Office of Air Quality 100 North Senate Avenue MC 61-53, Room 1003 Indianapolis, Indiana 46204-2251 Toll free (within Indiana): 1-800-451-6027 extension 3-9664 Or dial directly: (317) 233-9664 MKhan1@idem.in.gov

Please refer to Permit Renewal No. 065-32753-00032 in all correspondence.

Indiana Department of Environmental Management

Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name: Duke Energy Indiana, Inc. - Henry County Generating

Station

Source Location: 6045 West State Road 38, New Castle, Indiana 47362

County: Henry SIC Code: 4911

Permit Renewal No.: T065-32753-00032
Permit Reviewer: Muhammad D. Khan

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Duke Energy Indiana, Inc. - Henry County Generating Station relating to the operation of a power plant. On January 18, 2013, Duke Energy Indiana, Inc. - Henry County Generating Station submitted an application to the OAQ requesting to renew its operating permit. Duke Energy Indiana, Inc. - Henry County Generating Station was issued its first Part 70 Operating Permit Renewal T065-26399-00032 on January 2, 2009.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) Three (3) combustion turbines, firing natural gas, designated as Units 1 through 3, installed in November 1999, equipped with water-injection for NO_X control and continuous emission monitoring system (CEMS) for NOX and CO emissions, exhausting to stacks 1 through 3, nominally rated at 407.8 million British thermal units, each.

Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit

The source does not consists of the any emission units that were constructed and/or are operating without a permit.

Emission Units and Pollution Control Equipment Removed From the Source

No emission units or pollution control equipment has been removed from the source since the last permit approval.

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, rated at a total of 0.48 million British thermal units per hour, including:
 - (1) Four (4) space heaters, rated at 0.10 million British thermal units per hour, each.
 - (2) One (1) space heater, rated at 0.08 million British thermal units per hour.

- (b) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids, including: Six (6) drums of lubricating oils, capacity: 55 gallons.
- (c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (d) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume.
- (e) Noncontact cooling tower systems with either of the following: forced and induced draft cooling tower system not regulated under a NESHAP.
- (f) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (g) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (h) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (i) On-site fire and emergency response training approved by the department.
- (j) Other activities or categories not previously identified with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_x, three (3) pounds per hours or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead:
 - (a) One (1) waste oil tank, identified as Tank 3, installed in 1999, exhausting to the atmosphere, with a maximum capacity of: 5,312 gallons of waste oil.
 - (b) One (1) Econoline Model 48-2 Super grit blaster equipped with a 100 cfm dust collector.

Existing Approvals

Since the issuance of the Part 70 Operating Permit 065-26399-00032 on January 2, 2009, the source has constructed or has been operating under the following additional approvals:

(a) Significant Permit Modification No. 065-25763-00032 issued on June 2, 2009.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Henry County.

Pollutant	Designation				
SO ₂	Better than national standards.				
CO	Unclassifiable or attainment effective November 15, 1990.				
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹				
PM ₁₀	Unclassifiable effective November 15, 1990.				
NO ₂	Cannot be classified or better than national standards.				
Pb	Not designated.				
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked					

effective June 15, 2005.

Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Henry County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$

Henry County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011.. Therefore, direct $PM_{2.5}$, SO_{2} , and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Henry County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions, from the affected facility to which the New Source Performance Standard is applicable, are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions						
Pollutant	Tons/year					
PM	10.19					
PM ₁₀	35.38					
PM _{2.5}	35.38					
SO ₂	18.22					
VOC	48.24					
СО	1,752.40					
NO _x	589.64					
GHGs as CO₂e	639,179.3					

HAPs	tons/year				
Single HAP	3.8 (Formaldehyde)				
Total	5.51				

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of CO and NOx is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHGs is equal to or greater than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Page 5 of 12 T065-32753-00032

Duke Energy Indiana, Inc. Henry County Generating Station

New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
Process/ Emission Unit	PM	PM ₁₀ *	PM _{2.5} **	SO ₂	NO _x	VO C	СО	GHGs	Total HAP s	Worst Single HAP
Combustion Turbines (Unit 1, Unit 2, Unit 3)	10.2	35.37	35.37	18.22	less than 249.7	48.2 3	less than 249.8	638929	5.50	3.8 (Formaldehyde)
Insignificant Activities (Heaters)	0.004	0.016	0.016	0.001	0.210	0.01	0.177	250.683	0.004	0.0037 (Hexane)
Total PTE of Entire Source	10.2	35.4	35.4	18.2	>250	48.2	>250	639,179	5.51	3.8 Formaldehyde
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000 CO ₂ e	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO ₂ e	NA	NA

negl. = negligible

**PM_{2.5} listed is direct PM_{2.5}.

This existing stationary source has taken limits on CO and NOx emissions bellow 250 tons per year. This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1), and the source has not undertaken a physical change or change in the method of operation on or after July 1, 2011 that resulted in an emissions increase of seventy-five thousand (75,000) tpy CO₂e or more and also an increase of regulated pollutant above significant levels.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

^{*}Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

Emission Unit / Pollutant	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
Turbine Unit 1 /CO	N	Υ	584	>100	100	N	Ν
Turbine Unit 2 /CO	N	Υ	584	>100	100	N	N
Turbine Unit 3 CO	N	Υ	584	>100	100	Ν	N
Turbine Unit 1 NOx	Υ	Υ	196	>100	100	N*	N
Turbine Unit 2 NOx	Υ	Υ	196	>100	100	N*	N
Turbine Unit 3 NOx	Υ	Υ	196	>100	100	N*	N

^{*}The PTE of NO_X of each turbines is greater than 100 tons per year. CAM is not applicable to the three (3) turbines because the source is subject to the Acid Rain program which specifies a monitoring method for compliance.

Each of the three (3) combustion turbine at this part 70 source has an uncontrolled PTE of NOx greater than 100 tons per year, and uses water injection to control NOx emissions to comply with the applicable limits of 326 IAC 60, Subpart GG, However pursuant to 40 CFR 64.2(b)(iii) and (iv), Exemptions, the requirement of part 64 do not apply to sources subject to the Acid Rain program, nor to sources with an emission limit or standard for which a Part 70 Permit specfies a continuous compliance determination method (i.e., Condition D.1.3 of this Part 70 operating permit).

The three (3) combustion turbine have potential to emit of any single HAP less than 10 tons per year and combination of HAP less than 25 tons per year and have no control for HAPs.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

(b) 326 IAC 12 and 40 CFR 60, Subpart GG

The three (3) combustion turbines are subject to 40 CFR Part 60, Subpart GG because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

Pursuant to 326 IAC 12-1 and 40 CFR 60, Subpart GG (Stationary Gas Turbines), the Permittee shall comply with the following portions of 40 CFR 60, Subpart GG:

- (1) 40 CFR 60.330
- (2) 40 CFR 60.331
- (3) 40 CFR 60.332
- (4) 40 CFR 60.333
- (5) 40 CFR 60.334
- (6) 40 CFR 60.335
- (c) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

(e) This source is subject to the requirements of 40 CFR Part 72 through 80 (Acid Rain Program). The requirements of this program shall be incorporated in to this Permit. The source received their Acid Rain, Phase II permit on June 1, 2001.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source has the potential to emit of at least one regulated pollutant greater than 250 tons per year. The source took a limit to be a minor source for PSD in 1999 and it is not one of the twenty-eight (28) listed sources.

326 IAC 2-6 (Emission Reporting)

This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM10 is less than 250 tons per year; and the potential to emit of CO, NOx, and SO2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2014, and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 3-5 (Continuous Emission Monitoring System (CEMS))

The source is required to install, operate and maintain Continuous Emission Monitoring System (CEMS) and related equipment for measuring CO and NOX emissions from the three combustion turbines.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-2 PM Limitations for Source of Indirect Heating

The three (3) natural gas-fired combustion turbines are not subject to 326 IAC 6-2 because they are not an indirect heating units.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability – Individual Facilities

Combustion Turbines (Unit #1, 2 & 3)

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The potential to emit sulfur dioxide from the three (3) simple-cycle combustion turbines are less than twenty-five (25) tons per year, therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) are not applicable to the emission units.

326 IAC 8-1-6 (New facilities; general reduction requirements):

The potential to emit VOC from each of the three (3) combustion turbines, identified as units 1 through 3, is less than twenty-five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to the emission units.

326 IAC 9-1 (Carbon Monoxide Emission Limits):

This source is subject to 326 IAC 9-1 because it is a stationary source of CO emissions commencing operation after March 21, 1972. There are no applicable CO emission limits, under this state rule, established for this type of operation.

326 IAC 24 (Clean Air Interstate Rule (CAIR))

Combustion turbines Unit #1 through Unit #3 are subject to the Clean Air Interstate Rule (CAIR) Nitrogen Oxides Annual, Sulfur Dioxide, and Nitrogen Oxides Ozone Season Trading Programs – CAIR Permit for CAIR Units under 326 IAC 24-1-1(a), 326 IAC 24-2-1(a), and 326 IAC 24-3-1(a).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no other compliance determination and monitoring requirements except as stated by NSPS.

Proposed Changes

The changes listed below have been made to the Part 70 Operating Permit Renewal No. T065-32753-00032. Deleted language appears as strikethroughs and new language appears in **bold**:

Change No. 1:

Pursuant to 326 IAC 10-4-16, sections 1 through 15 of 326 IAC 10-4 shall not apply to any control period in 2009 or thereafter. The conditions in Section F - Nitrogen Oxides Budget Trading Program - NOx Budget Permit for NOx Budget Units Under 326 IAC 10-4-1(a), are no longer applicable to this source. Therefore, Section F is deleted from the permit as follows:

SECTION F Nitrogen Oxides Budget Trading Program - NO_x Budget Permit for NO_x Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 7763

NO_x Budget Source [326 IAC 2-7-5(15)]

Three (3) combustion turbines, firing natural gas, designated as Unit 1, Unit 2, and Unit 3, installed in November 1999, equipped with water-injection for NO_x control, exhausting to stacks 1—through 3, nominally rated at 407.8 million British thermal units, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

F.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]

This NO_x budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

F.2 Standard Permit Requirements [326 IAC 10-4-4(a)]

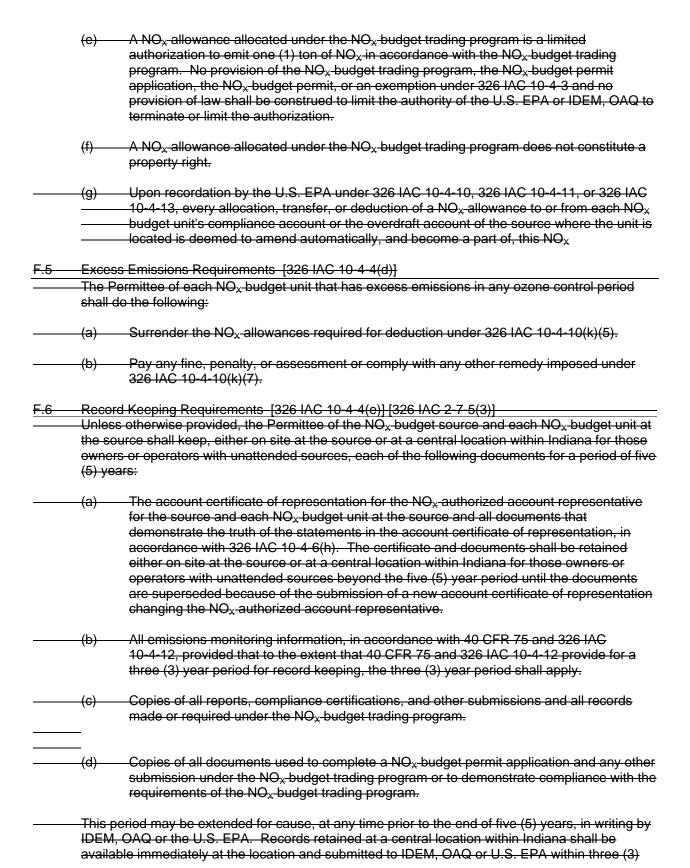
- (a) The Permittee of the NO_x budget source and each NO_x budget unit shall operate each unit in compliance with this NO_x budget permit.
- (b) The NO_X-budget units subject to this NO_X budget permit are: Combustion turbine units 1, 2, and 3.

F.3 Monitoring Requirements [326 IAC 10-4-4(b)]

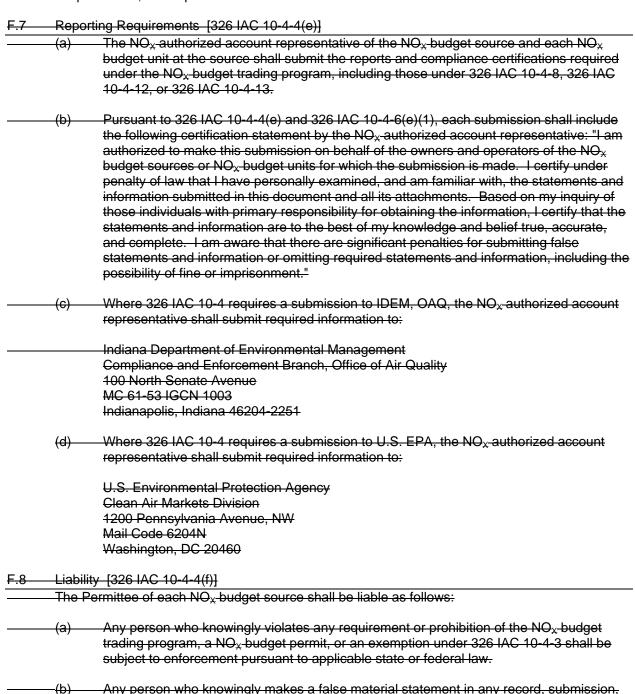
- (a) The Permittee and, to the extent applicable, the NO_x authorized account representative of the NO_x budget source and each NO_x budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_X budget emissions limitation under 326 IAC 10-4-4(c) and Condition F.4, Nitrogen Oxides Requirements.

F.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

- (a) The Permittee of the NO_x budget source and each NO_x budget unit at the source shall hold NO_x allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_x allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:
 - (1) Not less than the total NO_x emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;
 - (2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or
 - (3) To account for withdrawal from the NO_x budget trading program, or a change in regulatory status of a NO_x budget opt in unit.
- (b) Each ton of NO_X-emitted in excess of the NO_X budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.
- (c) NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.
 - (d) A NO_x allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_x allowance was allocated.



business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.



or report under the NO_x budget trading program shall be subject to criminal enforcement

No permit revision shall excuse any violation of the requirements of the NO_x budget

trading program that occurs prior to the date that the revision takes effect.

pursuant to the applicable state or federal law.

Duke Energy Indiana, Inc. Henry County Generating Station New Castle, Indiana

Permit Reviewer: Muhammad D. Khan

Page 12 of 12 T065-32753-00032

- (d) Each NO_x budget source and each NO_x budget unit shall meet the requirements of the NO_x budget trading program.
 - (e) Any provision of the NO_x budget trading program that applies to a NO_x budget source, including a provision applicable to the NO_x authorized account representative of a NO_x budget source, shall also apply to the owners and operators of the source and of the NO_x budget units at the source.
 - (f) Any provision of the NO_x budget trading program that applies to a NO_x budget unit, including a provision applicable to the NO_x authorized account representative of a NO_x budget unit, shall also apply to the Permittee of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the Permittee and the NO_x authorized account representative of one (1) NO_x budget unit shall not be liable for any violation by any other NO_x budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x-authorized account representative.

F.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NO_x budget trading program, a NO_x budget permit application, a NO_x budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the — Permittee and, to the extent applicable, the NO_x authorized account representative of a NO_x budget source or NO_x budget unit from compliance with any other provision of the applicable, — approved state implementation plan, a federally enforceable permit, or the CAA.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 18, 2013.

Conclusion

The operation of this stationary power plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 065-32753-00032.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Muhammad D. Khan at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-9664 or toll free at 1-800-451-6027 extension 3-9664.
- (b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations

Emission Summary

Source Name: Duke Energy Indiana, Inc. Henry County Generating Station

Source Location: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032 **Permit Reviewer:** Muhammad D. Khan

Date: 2/19/2013

	Uncontrolled Potential Emissions											
	PM (tons/yr)	PM ₁₀ (tons/yr)	PM _{2.5} (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	GHG (tons/yr)	Single HAP (tons/yr)	HAPs (tons/yr)		
Emission Unit												
Unit 1, Unit 2, Unit 3 (Combustion Turbines)	10.18	35.37	35.37	18.22	48.23	1752.23	589.43	638929	3.8 (Formaldehyde)	5.50		
Insignificant Activities (Heaters)	0.0040	0.0160	0.0160	0.0013	0.0116	0.1766	0.2102	250.6831	0.0037 (Hexane)	0.0040		
Total Emissions	10.19	35.38	35.38	18.22	48.24	1752.40	589.64	639179.33	3.8 (Formaldehyde)	5.51		

There are no fugitive emissions from the three combustion turbines.

	Limited Potential Emissions												
	PM (tons/yr)	PM ₁₀ (tons/yr)	PM2.5 (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NOx (tons/yr)	GHG (tons/yr)	Single HAP (tons/yr)	HAPs (tons/yr)			
Emission Unit													
Three (3) Combustion turbines (Unit 1 through 3)	10.2	35.37	35.37	18.22	48.23	less than 249.8	less than 249.7	638929	3.8 (Formaldehyde)	5.50			
Insignificant Activities	0.004	0.016	0.016	0.001	0.012	0.177	0.210	250.683	0.0037 (Hexane)	0.004			
Total Emissions	10.2	35.4	35.4	18.2	48.2	249.977	249.91	639179	3.8 (Formaldehyde)	5.51			

CO emissions from three combustion turbine are limited to less than 249.8 tone per year. NOX emissions from three combustion turbine are limited to less than 249.7 tone per year.

Appendix A: Emission Calculations Natural Gas Combustion MMBTU/HR >100

Three Combustion Turbines - Unit 1, Unit 2 and Unit 3

Company Name: Duke Energy Indiana, Inc. Henry County Generating Station

Address City IN Zip: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032 Reviewer: Muhammad D. Khan

Date: 19-Feb-2013

3 Combustion Turbines rated at 407.8 MMBtu Each

Heat Input Capacity
MMBtu/hr

Potential Throughput MMCF/yr

1223.4

10717.0

		Pollutant									
	PM	PM10	PM2.5	SO2	NOx*	VOC*	CO*				
Emission Factor in lb/MMBtu	0.0019	0.0066	0.0066	0.0034	0.1100	0.0090	0.3270				
Potential Emission in tons/yr	10.2	35.4	35.4	18.2	589	48.2	1752				

^{*}PM emission factor is filterable PM only. PM10 & PM2.5 emission factor is condensable and filterable combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42 (April 2000) Chapter 3, Tables 3.1-1 and 3.1-2 (Updated 4/00)

*Emission factors for NOx, VOC, and CO are from vendor analysis

Emission (tons/yr) = Heat Input Capacity (MMbtu/hr) * Emission factor (lb/MMbtu) * 8760 hr/yr /2000 lb/ton

Appendix A: Emission Calculations Natural Gas Combustion-Green House Gases Calculation MMBTU/HR >100

Three Combustion Turbines - Unit 1, Unit 2 and Unit 3

Company Name: Duke Energy Indiana, Inc. Henry County Generating Station

Address City IN Zip: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032 Reviewer: Muhammad D. Khan

Date: 19-Feb-2013

	(Greenhouse Gas	3		
Emission Factor in kg/MMBtu	CO2 53.02	CH4 0.0010	N2O 0.0001		
Potential Emission in tons/yr	638,303	12.0	1.2		
Summed Potential Emissions in tons/yr	r 638,316				
Global Warming Potentials	1	21	310		
CO2e Total in tons/yr		638,929			

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Natural Gas Combustion Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (kg/MMBtu) x 1020 MMBtu/MMscf x 1lbs/0.454 kg x 1 ton/2000 lbs CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emissions Calculations HAP Potential Emissions

Company Name: Duke Energy Indiana, Inc. Henry County Generating Station

Address City IN Zip: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032
Reviewer: Muhammad D. Khan
Date: 19-Feb-2013

Three (3) Combustion Turbines rated at 407.8 MMBtu/hr each

Pollutant	Emission Factor (lb/MMBtu)	Emission Rate per Turbine (lbs/hr)	Emission Rate per Turbine (ton/yr)	Total Emissions (Units 1-3) (tons/yr)
Natural Gas				
1,3 Butadiene	4.30E-07	0.0002	0.001	0.002
Acetaldehyde	4.000E-05	0.016	0.071	0.214
Acrolein	6.400E-06	0.003	0.011	0.034
Benzene	1.200E-05	0.005	0.021	0.064
Ethylbenzene	3.200E-05	0.013	0.057	0.171
Formaldehyde	7.100E-04	0.290	1.27	3.80
Naphthalene	1.300E-06	0.001	0.002	0.007
PAH	2.200E-06	0.001	0.004	0.012
Propylene Oxide	2.900E-05	0.012	0.052	0.155
Toluene	1.300E-04	0.053	0.232	0.697
Xylenes	6.400E-05	0.026	0.114	0.343
			Single HAP	3.80
			Total HAPs	5.50

Methodology

The emission rate is based on AP-42 Chapter 3.1(4/00) Emission Factors Emission (lbs/hr) = Emission factor (lb/MMBtu) * Heat Input (MMBtu/hr) Emission (tons/year) = Emissions (lbs/hr) * 8760 hr/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

5 Space Heaters

Company Name: Duke Energy Indiana, Inc. Henry County Generating Station

Address City IN Zip: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032 Reviewer: Muhammad D. Khan

Date: 19-Feb-2013

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

0.48 4.2

		Pollutant										
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	PM2.5* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	CO 84.0					
Potential Emission in tons/yr	0.004	0.016	0.016	0.001	0.210	0.012	0.177					

^{*}PM emission factor is filterable PM only. PM10 and PM2.5 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

5 Space Heaters HAPs Emissions

Company Name: Duke Energy Indiana, Inc. Henry County Generating Station
Address City IN Zip: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032 Reviewer: Muhammad D. Khan

Date: 19-Feb-2013

		H	IAPs - Organics		
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Emission Factor in to/white	2.1E-03	1.2E-03	7.3E-02	1.02+00	3.4E-03
Potential Emission in tons/yr	4.415E-06	2.523E-06	1.577E-04	3.784E-03	7.148E-06

			HAPs - Metals		
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	1.051E-06	2.313E-06	2.943E-06	7.989E-07	4.415E-06
				Total =	0.004

Methodology:

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4. Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations **Natural Gas Combustion Only** MM BTU/HR <100 5 Space Heaters

GHG Emissions

Company Name: Duke Energy Indiana, Inc. Henry County Generating Station Address City IN Zip: 6045 West State Road 38, New Castle, IN 47362

Permit Number: T 065-32753-00032 Reviewer: Muhammad D. Khan

Date: 19-Feb-2013

	G	reenhouse Gas		
Emission Factor in kg/MMBtu	CO2 53.02	CH4 0.0010	N2O 0.0001	
Potential Emission in tons/yr	250	0.0047	0.0005	
Summed Potential Emissions in tons/yr	250			
Global Warming Potentials	1	21	310	
CO2e Total in tons/yr		251		

Methodology

CO2, CH4 and N2O emissions factors are from 40 CFR 98 Subpart C, Table C-1 and Table C-2 for Natural Gas Combustion Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (kg/MMBtu) x 1020 MMBtu/MMscf x 1lbs/0.454 kg x 1 ton/2000 lbs

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



We Protect Hoosiers and Our Environment.

Michael R. Pence Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Mack Sims

Duke Energy Indiana, Inc. - Henry Generating Station

1000 E Main St Plainfield, IN 46168

DATE: May 22, 2013

FROM: Matt Stuckey, Branch Chief

Permits Branch Office of Air Quality

SUBJECT: Final Decision

Title V - Renewal 065 - 32753 - 00032

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to: Michael J. Vorderbrueggen, General Manager of Simple Cycle Midwest OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07







We Protect Hoosiers and Our Environment.

Michael R. Pence Governor

Thomas W. Easterly Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

May 22, 2013

TO: New Castle Henry Co Public Library

From: Matthew Stuckey, Branch Chief

> Permits Branch Office of Air Quality

Subject: Important Information for Display Regarding a Final Determination

> **Duke Energy Indiana, Inc. - Henry Generating Station** Applicant Name:

Permit Number: 065 - 32753 - 00032

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, we ask that you retain this document for at least 60 days.

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

> Enclosures Final Library.dot 11/30/07



IDEM Staff	LPOGOST 5/22	/2013		
	Duke Energy Ind	liana, Inc Henry County Generating 065 -	32753 - 00032 final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GNET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Mack Sims Duke Energy Indiana, Inc Henry County Generatin 1000 E Main St Plaint	ield IN 46168	3 (Source CAA	ATS)			•	•		
2		Michael J. Vorderbrueggen General Manager of Simple Cycle Midwest Duke Energy I CAATS)	ndiana, Inc	Henry County	y Generatin c/o Macl	s Sims 1000	E Main St Plainfi	eld IN 461	68 <i>(RO</i>		
3		Mr. Curt Yeager 1937 N 600 W Anderson IN 46011 (Affected Party)									
4		Jarl Campbell 6912 N. CR 700 W. Middletown IN 47356 (Affected Party)									
5		ean Sanders 5299 N. County Road 525 W. Middletown IN 47356 (Affected Party)									
6		Mr. Ed Tarantino 5752 N. 400 W. Middletown IN 47356 (Affected Party)									
7		Mr. John & Pam Cooper P.O. Box 156 Middletown IN 47356 (Affected Party)									
8		John & Carolyn Hinton 4767 N. 450 W Middletown IN 47356 (Affected Party)									
9		Tony Sanders 7845 N. County Road 400 W. Middletown IN 47356 (Affected Party)									
10		Larry Sanders 7832 N. CR 500 W. Middletown IN 47356 (Affected Party)									
11		Linda & Carey Jones 5809 W 950 N Middletown IN 47356 (Affected Party)									
12		Ferrell 2528 N. CR 500 W. Middletown IN 47356 (Affected Party)									
13		James & Evelyn Poor 4713 W US 36 Middletown IN 47356 (Affected Party)									
14		Mr. Jeff Myers 2454 N. 500 W. Middletown IN 47356 (Affected Party)									
15		Mr & Mrs. Jim Minnick 144 N. 7th Street Middletown IN 47356 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per
			occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal
			insurance. See Domestic Mail Manual R900 , S913 , and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Ind	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAIEMO SILE	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		George 5160 W. 300 N. Middletown IN 47356 (Affected Party)									Remarks
2		Ms. Linda Norris 5423 W Church St Middletown IN 47356 (Affected Party)									
3		Ms. Ruth Ann Cronk 4863 W CR 600 N Middletown IN 47356 (Affected Party)									
4		Mr. Steve Bowers 4921 W 600 N Middletown IN 47356 (Affected Party)									
5		Nancye Scott 813 Earl Ave. Middletown IN 47356 (Affected Party)									
6		Mr. Don Shaw 3322 W 400 N Middletown IN 47356 (Affected Party)									
7		Ms. Jean Wisehart 5452 N Raider Rd Middletown IN 47356 (Affected Party)									
8		Frank & Jeff McCrocklin 683 N 8th St Middletown IN 47356 (Affected Party)									
9		Eunice & Barb Stevens 6047 N CR 850 W Middletown IN 47356 (Affected Party)									
10		Mr. George Kirkpatrick 510 11th St Middletown IN 47356-1241 (Affected Party)									
11		Wendy Stephens 5649 N. 400 W. Middletown IN 47356 (Affected Party)									
12		Walley Green 5701 West County Road 600 South Muncie IN 47302 (Affected Party)									
13		Mr. Barry Banks 959 W CR 500 S Muncie IN 47302 (Affected Party)									
14		Mr. Thomas Gordy 6291 W Jones Rd Muncie IN 47302 (Affected Party)									
15		Ms. Genny Gordy 316 West Cromer Avenue Muncie IN 47303 (Affected Party)									

	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , S913 , and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	---

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Ind	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		James 9815 N. CR. 300 E. Muncie IN 47303 (Affected Party)									Remarks
2		Mr. Joe Shroyer 6626 E. Co Rd 285 N Muncie IN 47303 (Affected Party)									
3		Kathleen Elliott 1150 Montgomery St W. Lafayette IN 47906 (Affected Party)									
4		Neal Fouch Teresa Bartlrum 300 W Berkely Ave Muncie IN 47303 (Affected Party)									
5		Mr. Daniel D. Richey 1813 N. County Road 650 West New Castle IN 47362 (Affected Party)									
6		Mrs. Donath Rutherford 962 E. Lake Crest Ave. New Castle IN 47362 (Affected Party)									
7		Mr. Larry and Polly McCord 6403 W. 100 N. New Castle IN 47362 (Affected Party)									
8		Jeffrey & Cynthia Atkinson 1047 N Mill St-Cadiz New Castle IN 47362 (Affected Pari	y)								
9		Jackie & Barbara Cronk 1352 North Kennard Rd New Castle IN 47362 (Affected Par	ty)								
10		Mr. Ronnie Sowers 818 North 500 West New Castle IN 47362 (Affected Party)									
11		Marilyn & Vernon Cherrett 712 North 500 West New Castle IN 47362 (Affected Party	')								
12		Randy & Karen Thompson 116 North 600 West New Castle IN 47362 (Affected Part	/)								
13		Betty Viars 368 South County Road 325 W. New Castle IN 47362 (Affected Party)									
14		Don Miller 3632 W. CR 100 S New Castle IN 47362 (Affected Party)									
15		Jerry Saunders 6400 W. SR 234 New Castle IN 47362 (Affected Party)									

	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , S913 , and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	---

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Indi	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		David 7251 Schindel Road Albany IN 47320 (Affected Party)									Remarks
2		Patty Bartlett 11590 E. CR 350 N. Albany IN 47320 (Affected Party)									
3		Mr. Robert Abshire 2158 West County Rd 250 North Anderson IN 46011 (Affected Pa	arty)								
4		Mr. Jim Elliott 1538 E. CR. 1500 N. Carbon IN 47837 (Affected Party)									
5		Christine Wearly 8400 S. 600 W. Daleville IN 47334 (Affected Party)									
6		Mr. Kerwin Olson Citizens Action Coalition 603 E Washington St Ste 502 Indianapolis IN 46204 (Affected Party)									
7		Don Dudley 4289 W. Old Natl Road Knightstown IN 46148 (Affected Party)									
8		Larry & Sharon Marsh 8820 W. US 36 MIddletown IN 47356 (Affected Party)									
9		Ms. Marcia Shock 9837 W SR 38 Markleville IN 46056 (Affected Party)									
10		Lisa & Joe Hillman 2460 West 650 North Middletown IN 47356 (Affected Party)									
11		Mr. & Mrs. Larry Marsh 2498 W. CR 575 N. Middletown IN 47356 (Affected Party)									
12		Mr. Stults 5363 W 300 N Middletown IN 47356 (Affected Party)									
13		Mr & Mrs. Steve Martin 6157 County Road 525 SW Middletown IN 47356 (Affected Party)									
14		Linda K. Bentle & Thom Horton & Brigham Robbins 8924 W. 550 N. Middletown IN 4	7356 (Affect	ed Party)							
15		Mr. & Mrs. Joyce Bosman 768 Central Avenue Middletown IN 47356 (Affected Party)								

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per
			occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal
			insurance. See Domestic Mail Manual R900 , S913 , and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Ind	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		Nancy 5587 N 400 W Middletown IN 47356 (Affected Party)									Remarks
2		Beth & James Solomon 3888 W. 850 N. Middletown IN 47356 (Affected Party)									
3		Maynard & Mary Powell 130 N 6th St Middletown IN 47356 (Affected Party)									
4		Ms. Kim Bond 5261 N. CR 850 W. Middletown IN 47356 (Affected Party)									
5		Ms. Beth Branscum 4275 N. 500 W. Middletown IN 47356 (Affected Party)									
6		Mila & Chris Weber 5673 N. 850 W, Middletown IN 47356 (Affected Party)									
7		Stan Petty 2536 N. County Road 300 W. New Castle IN 47362 (Affected Party)									
8		Mr. Stephen Robinson 170 N CR 400 W New Castle IN 47362 (Affected Party)									
9		Mr. & Mrs. Larry Cole 1289 N. CR 525 W. New Castle IN 47362 (Affected Party)									
10		Jeffrey & Debbie Powell 120 N 600 W New Castle IN 47362 (Affected Party)									
11		Alvis & Lettic Hoots 462 N. Clouer Dr. New Castle IN 47362 (Affected Party)									
12		JW Massengale 1200 W. Street, Rd 38 New Castle IN 47362 (Affected Party)									
13		Ms. Robin Reno-Fleming 1417 Church St New Castle IN 47362 (Affected Party)									
14		Dempsey Bruton 1246 West SR 38 New Castle IN 47362 (Affected Party)									
15		Mary & Mark Pierce 1512 N 425 W New Castle IN 47362 (Affected Party)									

	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , S913 , and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	---

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Indi	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Cronk & 1441 W. CR 100 South New Castle IN 47362 (Affected Party)									
2		Mr. Troy Howell 1354 Cadiz Pk New Castle IN 47362 (Affected Party)									
3		Billy Hamky 5098 N. Messick Road New Castle IN 47362 (Affected Party)									
4		Ms. Annie Jones 1335 Onyx Court New Castle IN 47362 (Affected Party)									
5		Dick & Gail Byers 1512 Castle Hills Drive New Castle IN 47362 (Affected Party)									
6		Leif & Amanda Olson 177 Clearview Dr New Castle IN 47362 (Affected Party)									
7		Mr. Richard Hubbs 4674 W. Street, Rd 234 New Castle IN 47362 (Affected Party)									
8		Tom Cash 1677 N. 425 W. New Castle IN 47362 (Affected Party)									
9		Rose Ann Sweigart 2911 W SR 38 New Castle IN 47362 (Affected Party)									
10		Mr. Mike Sweigart 519 S 400 W New Castle IN 47362 (Affected Party)									
11		Melvin & Carol Stults 1307 S. 18th New Castle IN 47362 (Affected Party)									
12		Mr. Larry Thomas 300 N CR 300 E New Castle IN 47362 (Affected Party)									
13		Denney Resident 1331 J Ave New Castle IN 47362 (Affected Party)									
14		Janice Kernel 1651 E - 600 N New Castle IN 47362 (Affected Party)									
15		Mr. & Mrs. Dennis R. Greene 1398 W. 300 N. New Castle IN 47362 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	---

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Indi	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		Wade 7072 W. State Rd 38 New Castle IN 47362 (Affected Party)									Remarks
2		Maxine Barricus 5514 W. 200 N. New Castle IN 47362 (Affected Party)									
3		James Bolander 5426 W. 200 N. New Castle IN 47362 (Affected Party)									
4		Ron Harris 6871 W. SR 234 New Castle IN 47362 (Affected Party)									
5		Mr. & Mrs. Steve Dellinger 2523 N. Co. Rd 425 W New Castle IN 47362 (Affected Party)									
6		Tim & Karen Hamilton 225 N 400 W New Castle IN 47362 (Affected Party)									
7		Kirstin Olson 129 N. 26th St New Castle IN 47362 (Affected Party)									
8		Mr. James Smith 4808 W SR 234 New Castle IN 47362 (Affected Party)									
9		Gerald Boline 5178 W. 200 N. New Castle IN 47362 (Affected Party)									
10		Karen Marcum 2394 South Spiceland Road New Castle IN 47362 (Affected Party)									
11		Mr. Platts 311 N 12th St New Castle IN 47362 (Affected Party)									
12		Arthur & Winifred Gray 5505 W CR 100 N New Castle IN 47362 (Affected Party)									
13		V. Price 8285 18th New Castle IN 47362 (Affected Party)									
14		Eugene Brown 916 Randy Am Ct New Castle IN 47362 (Affected Party)									
15		Tim & Ricci Atchison 1144 W CR 400 N New Castle IN 47362 (Affected Party)									

	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , S913 , and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	---

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Ind	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAIEMO SILE	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		Mr. & Mrs. David 3108 N. Cadiz Pike New Castle IN 47362 (Affected Party)									Remarks
2		Violet Wells 3828 West Street, Road 38 New Castle IN 47362 (Affected Party)									
3		David Chambers 2239 N. Cadiz New Castle IN 47362 (Affected Party)									
4		Jack & Walter Thomas 4083 US Highway 35 E New Castle IN 47362 (Affected Party	<i>'</i>)								
5		Mr. Gerald Utt 3091 S SR 103 New Castle IN 47362 (Affected Party)									
6		Mr. Stanley Sidwell 2726 S Main St New Castle IN 47362 (Affected Party)									
7		Mr. & Mrs. Hersel Ankrom 903 Lincoln Avenue New Castle IN 47362 (Affected Party))								
8		Maribeth Taylor PO Box 385 New Castle IN 47362 (Affected Party)									
9		Robert Harris Jr. 583 South 600 West New Castle IN 47362 (Affected Party)									
10		Ms. Michelle Anderson 1469 S. Greensboropk New Castle IN 47362 (Affected Party)									
11		Mr & Mrs. Mike Byrd 1583 W. County Club New Castle IN 47362 (Affected Party)									
12		Ms. Kimberly Hays 2405 N SR 3 New Castle IN 47362 (Affected Party)									
13		Mr. Jim & Linda Bennett 2405 N SR 3 New Castle IN 47362 (Affected Party)									
14		Joe & Annette Reamer 1862 N 300 W New Castle IN 47362 (Affected Party)									
15		Mr. Walter Flockhart 1322 Audubon Rd New Castle IN 47362 (Affected Party)						•			

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual R900</i> , S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international
			mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Ind	iana, Inc Henry County Generating Static	on 32753 (draft/final)	AFFIX STAMP
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAIEMO SILE	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Richard & Margaret 416 Lenora Lee Dr New Castle IN 47362 (Affected Party)									
2		Mr. Nick Petry 2536 N CR 300 W New Castle IN 47362 (Affected Party)									
3		Mr. Pat Neal 2808 S 14th St New Castle IN 47362 (Affected Party)									
4		Mr. Bill Fribley 2654 S Spiceland Pk New Castle IN 47362 (Affected Party)									
5		Ms. Cara Neuman 192 N Clover Dr New Castle IN 47362 (Affected Party)									
6		Ms. Deana Harris 5256 N CR 75 W New Castle IN 47362 (Affected Party)									
7		Gerald & Roberta Haynes 2625 N CR 650 W New Castle IN 47362 (Affected Party)									
8		Mrs. Joyce Thompson 6663 E CR 2005 New Castle IN 47362 (Affected Party)									
9		Rose & Thomas Kramer 137 N CR 500 W New Castle IN 47362 (Affected Party)									
10		Mr. Willie Lowe 3159 W SR 38 New Castle IN 47362 (Affected Party)									
11		Ms. Susan Stoots 4860 W CR 350 S New Castle IN 47362 (Affected Party)									
12		New Castle City Council and Mayors Office 227 N Main St New Castle IN 47362 (Lo	ocal Official)								
13		Henry County Board of Commissioners 101 S. Main St New Castle IN 47362 (Local	Official)								
14		Mr. & Mrs. Thomas Cronk 6312 West C.R. 100 N New Castle IN 47362 (Affected Pa	rty)								
15		Mr. Jay Cory 478 N. Clover Drive New Castle IN 47362 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels
			mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

IDEM Staff	LPOGOST 5/22	/2013		
	Duke Energy Ind	liana, Inc Henry County Generating Station	AFFIX STAMP	
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GNET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Thomas Lee 4005 South Franks Lane Selma IN 47383 (Affected Party)									
2		Mr. & Mrs. Carl Osborne 8483 West 100 North Shirley IN 47384 (Affected Party)									
3		Ms. Shirley Hinshaw 8224 W. C.R. 300 N. Shirley IN 47384 (Affected Party)									
4		Duane & Suzanne Clark 8648 W. SR 38 Shirley IN 47384 (Affected Party)									
5		Mr. & Mrs. Cross 2161 N. Mechanicsburg Shirley IN 47384 (Affected Party)									
6		Jeryl Whelchel 8060 W. 100 N. Shirley IN 47384 (Affected Party)									
7		Mr. Ryan Russell 4449 N 950 W Shirley IN 47384 (Affected Party)									
8		Robert Harris 6110 W. 100 S. Shirley IN 47384 (Affected Party)									
9		Howard & Jacquline Harris 2360 N. Raider Road Shirley IN 47384 (Affected Party)									
10		Mr. Wes Cumins 8243 W 300 N Shirley IN 47384 (Affected Party)									
11		Kevin & Kathy Jones 9443 W SR 38 Shirley IN 47384 (Affected Party)									
12		Mr & Mrs. Randy Good 9566 W. Central Ave. Shirley IN 47384 (Affected Party)									
13		Ms. Esther Brock 6123 S CR 750 S Spiceland IN 47385 (Affected Party)									
14		Mr. Mike Higgs 6953 N CR 200 W Springport IN 47386 (Affected Party)									
15		Richard Dalton 8175 W. CR 100 W. Springport IN 47386 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage on international increase and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international
			inured and COD mail. See International Mail Manual for limitations o coverage on international
			mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Ind	iana, Inc Henry County Generating Static	AFFIX STAMP	
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAIEMO SILE	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Bob 7771 N. 100 E. Springport IN 47386 (Affected Party)									
2		Marsha & David Gratner P.O. Box 8 Sulphur Springs IN 47388 (Affected Party)									
3		Mr. Don Frazier P.O. Box 228 Sulphur Springs IN 47388 (Affected Party)									
4		Ms. Sharon Smith P.O. Box 226 Sulphur Springs IN 47388 (Affected Party)									
5		Mr. James McShirley Box 138 Sulphur Springs IN 47388 (Affected Party)									
6		Mr. Dallas McKee S 113 Meridian St Sulphur Springs IN 47388-9700 (Affected Party)									
7		Katherine & Stephen Fox PO Box 300 Shirley IN 47384 (Affected Party)									
8		Mr. Eric Moore P.O. Box 4 Lewisville IN 47352 (Affected Party)									
9		New Castle Henry Co Public Library 376 South 15th St, P.O. Box J New Castle IN 4	7362-1050 <i>(I</i>	Library)							
10		Louis Crowe 3725 S. Memoria Drive New Castle IN 47362 (Affected Party)									
11		C.K. & H. Ronald Taylor 4846 Beechmont Dr Anderson IN 46012 (Affected Party)									
12		June Van Buskirk 428 N. Clover Drive New Castle IN 47362 (Affected Party)									
13		Belinda & Jeff Goble 5562 W. CR 100 N. New Castle IN 47362 (Affected Party)									
14		Mr. Glen & Liz Abrams P.O. Box 521 New Castle IN 47362 (Affected Party)									
15		Mr & Mrs. Hoots 4860 W. CR. 350 S. New Castle IN 47362 (Affected Party)									

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per
			occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal
			insurance. See Domestic Mail Manual R900 , S913 , and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

IDEM Staff	LPOGOST 5/22/	/2013		
	Duke Energy Indi	iana, Inc Henry County Generating Static	AFFIX STAMP	
Name and		Indiana Department of Environmental	Type of Mail:	HERE IF
address of		Management		USED AS
Sender		Office of Air Quality – Permits Branch	CERTIFICATE OF	CERTIFICATE
		100 N. Senate	MAILING ONLY	OF MAILING
		Indianapolis, IN 46204	MAILING GIVET	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
1		Ron 3079 N. CR 650 W New Castle IN 47362 (Affected Party)									Remarks
2		Lee Walker 6932 E. CR 600 N. Mooreland IN 47360 (Affected Party)									
3		Maulyn Montgomery 1099 W. Hillside New Castle IN 47362 (Affected Party)									
4		Ronnie Sawn 818 N. 500 W. New Castle IN 47362 (Affected Party)									
5		Ms. Virginia Wolf 446 N. Clover Dr. New Castle IN 47362 (Affected Party)									
6		Henry County Health Department 1201 Race Street, Suite 208 New Castle IN 47362-4653 (Health Department)									
7		Susan Stoots 4860 W CR 350 S New Castle IN 47362 (Affected Party)									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50,000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <i>Domestic Mail Manual</i> R900, S913, and S921 for limitations of coverage on inured and COD mail. See <i>International Mail Manual</i> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
--	---	--	---