ANALYSIS AND PRELIMINARY DETERMINATION FOR THE PROPOSED REVISION TO CONSTRUCTION PERMIT 14-DMM-230 FOR THE ADDITION OF A COMPRESSOR REPLACMENT PROJECT FOR TWO COMBUSTION TURBINES

FOR
WISCONSIN PUBLIC SERVICE CORPORATION - FOX ENERGY CENTER,
LOCATED AT
310 EAST FRONTAGE ROAD,
KAUKAUNA, OUTAGAMIE COUNTY, WISCONSIN

Construction Permit No.: 14-DMM-230-R1
Facility ID No.: 445159110

This review was performed by the Wisconsin Department of Natural Resources, Northeast Region Headquarters in accordance with Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code.

Reviewed by: Dave Minkey Date: 08/24/2015

Peer review conducted by: /s/ Erin Hansel Date: 08/24/2015

Preliminary Determination Approved by:	**Signature**	**Date**
Regional Supervisor or Central Office Designee:	/s/ Imelda Hofmeister	08/25/2015
Stationary Source Modeling Team Leader:	Not Applicable	
Compliance Engineer (reviewed/approved):	/s/ Michelle Farley	08/25/2015

cc: Bureau of Air Management (AM/7) – Construction Permits

INTRODUCTION

Stationary sources that are not specifically exempt from the requirement to obtain a construction permit under s. 285.60(5), Wis. Stats. or ch. NR 406, Wis. Adm. Code may not commence construction, reconstruction, replacement, relocation or modification unless a construction permit for the project has been issued by the Department of Natural Resources' (DNR's) Air Management Program. Owners or operators subject to the construction permit requirements must submit a construction and operation permit application to the DNR. The application is reviewed following the provisions set forth in ss. 285.60 to 285.67, Wis. Stats. The criteria for permit issuance vary depending on whether the source is major or minor and whether the source is or proposed to be located in an attainment or nonattainment area.

Subject sources are to be reviewed with respect to the equipment and facility description provided in the application and for the resulting impact upon the air quality. The review ensures compliance with all applicable rules and statutory requirements. The preliminary determination will show why the source(s) should be approved, conditionally approved, or disapproved. It will encompass emission calculations and an air quality analysis using US EPA models, if applicable. Emissions from volatile organic compound (VOC) sources and small sources whose emissions are known to be insignificant are normally not modeled.

A final decision on the construction permit revision will not be made until at least 21 days after providing written notice to the permit holder and to the persons listed under s. 285.61(5)(a)2. to 5, Wis. Stats. The conditions proposed in the draft permit may be revised in any final permit issued based on comments received or further evaluation by the Department.

GENERAL APPLICATION INFORMATION

Owner/Operator: Wisconsin Public Service Corporation - Fox Energy Center
310 East Frontage Road
Kaukauna, WI 54130

Responsible Official: Scott Cherveny, Facility Manager – Fox Energy Center
(920) 225-5394

Application Contact Person: Cindy Brandt, Senior Environmental Consultant – Air Quality and Permitting
(920) 433-1830

Application Submitted By: Cindy Brandt, Senior Environmental Consultant – Air Quality and Permitting
(920) 433-1830

Application Receipt Date: August 12, 2015

Additional Information Submitted: Construction permit 14-DMM-230 (December 26, 2014, February 6, 2015, March 20, 2015, April 9, 2015, April 27, 2015), Additional information (August 19, 2015)

Date of Complete Application: August 24, 2015

PROJECT DESCRIPTION

Wisconsin Public Service Corporation (WPSC) was issued construction permit 14-DMM-230 on July 21, 2015, for a technology conversion project consisting of an engineered conversion and upgrade package for two existing combustion turbines at the Fox Energy Center. WPSC has requested that the construction permit be revised to allow for an additional project that will take place during the same outage as the technology conversion project. The additional project consists of the installation of a GE-engineered Compressor Package 4 which includes the replacement of the S0-S5 and S14-S16 stator vanes, re-cambered inlet guide vanes, and the addition of S5 "load dams" and the STARSS software module (control system logic). The Compressor Package 4 project has been engineered and planned separately from the technology conversion project. However, because both projects will take place during the same outage, WPSC has requested that the projects be aggregated for the purposes of air permitting.

Other Actions:

None.

SOURCE DESCRIPTION

Wisconsin Public Service Corporation - Fox Energy Center is a dual-fuel combined cycle power generation facility which utilizes two GE model 7FB.01 combustion turbine generators, arranged in a 2 x 1 configuration, with two Nooter/Eriksen heat recovery steam generators (HRSGs), one condensing Toshiba steam turbine generator and the associated balance-of-plant equipment. Each combustion turbine is capable of operating on either natural gas (the primary fuel) or No. 2 distillate fuel oil (the backup fuel). Each HRSG is equipped with supplementary natural gas-fired duct burners and the following post-combustion emission controls: a selective catalytic reduction (SCR) system and an oxidation (CO) catalyst.

Additional information about the air emission sources at the facility can be found in the preliminary determination for operation permit 445159110-P01.

Description of New or Modified Units.

A. Emission Unit Information.

Process number:	**P01**
Unit name:	Combined Cycle Combustion Turbine CT01
Manufacturer and model #:	Combustion turbine: General Electric 7FB.04 HRSG: Nooter/Eriksen
Fuel(s) fired:	Natural gas, distillate fuel oil
Maximum heat input (MMBtu/hr):	Combustion turbine: 2,055 HRSG: 614
Control technology status:	Controlled
Date of construction or last modification:	Constructed in September 2003, To be modified after permit issuance

Stack Information.

Stack identification number:	**S01**
Exhausting unit(s):	P01
This stack has an actual exhaust point?	Yes

Stack Information.

Discharge height above ground level (ft):	150
Inside dimensions at outlet (ft):	19
Exhaust flow rate (normal) (ACFM):	1,061,067; based on average ambient temperature of 45 ºF and base load operation on natural gas; unfired HRSG
Exhaust flow rate (maximum) (ACFM):	1,159,094; based on ambient temperature of -32 ºF and base load operation on natural gas; unfired HRSG
Exhaust gas temperature (normal) (°F):	204; based on average ambient temperature of 45 ºF and base load operation on natural gas; unfired HRSG
Exhaust gas temperature (maximum) (°F):	Not provided
Exhaust gas discharge direction:	Up
Stack equipped with any obstruction:	No

Control Device Information.

Control Device identification number:	**C01**
Exhausting emissions unit(s):	S01
Control device type:	Selective Catalytic Reduction
Date of construction:	September 2003

Control Device Information.

Control Device identification number:	**C02**
Exhausting emissions unit(s):	S01
Control device type:	Oxidation Catalyst
Date of construction:	September 2003

B. Emission Unit Information.

Process number:	**P02**
Unit name:	Combined Cycle Combustion Turbine CT02
Manufacturer and model #:	Combustion turbine: General Electric 7FB.04 HRSG: Nooter/Eriksen
Fuel(s) fired:	Natural gas, distillate fuel oil
Maximum heat input (MMBtu/hr):	Combustion turbine: 2,055 HRSG: 614
Control technology status:	Controlled
Date of construction or last modification:	Constructed in September 2003, To be modified after permit issuance

Stack Information.

Stack identification number:	**S02**
Exhausting unit(s):	P02
This stack has an actual exhaust point?	Yes
Discharge height above ground level (ft):	150

Stack Information.

Inside dimensions at outlet (ft):	19
Exhaust flow rate (normal) (ACFM):	1,061,067; based on average ambient temperature of 45 ºF and base load operation on natural gas; unfired HRSG
Exhaust flow rate (maximum) (ACFM):	1,159,094; based on ambient temperature of -32 ºF and base load operation on natural gas; unfired HRSG
Exhaust gas temperature (normal) (°F):	204; based on average ambient temperature of 45 ºF and base load operation on natural gas; unfired HRSG
Exhaust gas temperature (maximum) (°F):	Not provided
Exhaust gas discharge direction:	Up
Stack equipped with any obstruction:	No

Control Device Information.

Control Device identification number:	**C03**
Exhausting emissions unit(s):	S02
Control device type:	Selective Catalytic Reduction
Date of construction:	September 2003

Control Device Information.

Control Device identification number:	**C04**
Exhausting emissions unit(s):	S02
Control device type:	Oxidation Catalyst
Date of construction:	September 2003

Fuels and Firing Conditions.

	Fuel name	**Higher heating value**	**Max sulfur content (wt%)**	**Max ash content (wt%)**	**Moisture content as fired (%)**	**Max hourly consumption**	**Actual yearly consumption (2013)**
Primary Fuel	Natural Gas	1,020 Btu/scf	0.8 gr/100 scf	Negligible	<13.5%	2.617 MMCF	P01 – 5,360 MMCF P02 – 5,758 MMCF
Backup fuel	Diesel	140,000 Btu/gal	0.05%	Negligible	<15%	15.73 Mgal	P01 – 3,606 gal P02 – 728 gal

Stack Parameter Summary for Stack Included in 14-DMM-230-R1.

Stack #	**Actual Exhaust Point or Fugitive**	**Circular or Rectangular**	**Discharge Direction**	**Exhaust Obstacle**	**Diameter/ Width**	**Length (if rect.)**	**Height**	**Temp.**	**Normal Flow Rate**	**Maximum Flow Rate**
			U, D, H	**Yes/No**	**ft**	**ft**	**ft**	**°F**	**ACFM**	**ACFM**
S01	Actual	Circular	U	No	19	--	150	204	1,061,067	1,159,094
S02	Actual	Circular	U	No	19	--	150	204	1,061,067	1,159,094

Insignificant Emission Units

Maintenance of Grounds, Equipment, and Buildings (lawn care, painting, etc.)

Boiler, Turbine, and HVAC System Maintenance

Pollution Control Equipment Maintenance

Internal Combustion Engines Used for Warehousing and Material Transport

Fire Control Equipment

Janitorial Activities

Office Activities
Convenience Water Heating
Convenience Space Heating (< 5 million BTU/hr Burning Gas, Liquid, or Wood)
Fuel Oil Storage Tanks (< 10,000 gal.)
Demineralization and Oxygen Scavenging of Water for Boilers.
Purging of Natural Gas Lines
Sanitary Sewer and Plumbing Venting.
Chemical storage tank vents
Unpaved Roads
Tanks Associated with Insignificant Emissions
Lubricating Oil Systems
Plant Vacuum Systems
Cold Solvent Parts Cleaning
Process Safety Ventilation

CROSS MEDIA IMPACTS

There are no significant cross media impacts associated with this project.

EMISSION CALCULATIONS

The permit application and subsequent information submittal states that the GE Compressor Package 4 project will not result in any changes to emissions. The project primarily involves the replacement of certain compressor stator vanes with functionally equivalent vanes of a more robust design. Please refer to the preliminary determination for construction permit 14-DMM-230 for emission calculations for the combustion turbines

CH. NR 405, WIS. ADM. CODE, APPLICABILITY

Based on the information provided by the facility, the Department determined that the project permitted under construction permit 14-DMM-230 did not constitute a major modification. According to the construction permit revision application, the original equipment manufacturing has indicated that there will be no performance changes associated with the proposed GE Compressor Package 4 project. The project does not reclaim any forced outage hours for the combustion turbines and is not expected change hourly or annual post-project emissions. Therefore, the technology conversion and compressor replacement projects, when aggregated, do not constitute a major modification under ch. NR 405, Wis. Adm. Code. Please refer to the preliminary determination for construction permit 14-DMM-230 for details of the ch. NR 405, Wis. Adm. Code, applicability analysis for the technology conversion project.

WISCONSIN HAZARDOUS AIR POLLUTANT (NR 445) REVIEW

The proposed GE Compressor Package 4 project is not expected to result in any changes to emissions of HAPs regulated under ch. NR 445, Wis. Adm. Code. Please refer to the preliminary determination for construction permit 14-DM-230 for the ch. NR 445, Wis. Adm. Code, analysis.

COMPLIANCE AND TECHNOLOGY REVIEW

The proposed project is a minor modification under PSD and is not subject to BACT. Therefore, the existing PSD requirements for the turbines continue to apply.

AIR QUALITY REVIEW

The permit application indicates that the GE Compressor Package 4 project will not result in any changes to

emissions, so the previously conducted modeling analysis continues to be valid. The results of the previous modeling analysis are provided below:

A. Introduction

A dispersion modeling analysis was completed on February 14, 2010 to assess the impact to ambient air of the particulate matter (PM), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and carbon monoxide emissions from Fox Energy Company outside of Kaukauna (Outagamie County). This analysis was performed in support of construction permit 08-POY-258.

B. Modeling Analysis

- Fox Energy supplied the emission parameters used in this analysis via a report from RMT. Building dimensions were determined using BPIP-PRIME with measurements taken on plot plans provided with the application. Please refer to the source parameter table.
- Five years (1998-2002) of preprocessed meteorological data was used in this analysis. The surface data was collected in Green Bay, and the upper air meteorological data originated in Green Bay.
- The AERMIC (AMS/EPA Regulatory Model Improvement Committee) Model (AERMOD) was also used in the analysis. The model used rural dispersion coefficients with the regulatory default options. These allow for calm wind and missing data correction, buoyancy induced dispersion, and building downwash including recirculation cavity effects.
- Regional background concentrations were found to be as follows:

BACKGROUND CONCENTRATIONS (Concentrations are in $\mu g/m^3$)		
Pollutant	Averaging Period	Concentration
SO_2	3 hour 24 hour Annual	11.8 11.2 5.4
NO_2	Annual	8.0
CO	1 hour 8 hour	950.5 904.7
TSP	24 hr	39.7
PM_{10}	24 hr Annual	29.4 10.1

- The receptors used in this analysis consisted of a rectangular grid with 25-meter resolution extending 300 meters from the sources, surrounded by 100-meter spaced receptors extending 1 kilometer from the facility. Points within known fences or on top of buildings were not considered. Receptor terrain elevations were derived from the AERMOD terrain processor (AERMAP) National Elevation Dataset (NED) tiles.
- The Outagamie County PSD baselines for PM_{10}, SO_2, and NO_2 were set in 1983, 1983, and 1992 respectively. Any sources installed or modified since that date consumes increment. Fox Energy was constructed after these baseline dates, so all emissions consume increment. A review of the emissions inventory found no other increment consuming sources in the area.

C. Model Results

The results of the dispersion modeling analysis indicate that all air quality standards will be met assuming the emission rates and stack parameters listed in the source tables.

Modeling Analysis Results (All Concentrations in μg/m^3)			
	TSP – 24 hour	PM_{10} – 24 hour	PM_{10} – Annual
New/Mod. Source Impact	27.9	27.9	2.22
PSD Increment	n/a	30.0	17.0
% Increment Consumed	n/a	93.0	13.1
Facility Impact	27.9	27.9	2.2
Background Concentration	39.7	29.4	10.1
Total Concentration	67.6	57.3	12.3
NAAQS	150.0	150.0	50.0
% NAAQS	45.1	38.2	24.6

Modeling Analysis Results (All Concentrations in μg/m^3)			
	SO_2 – 3 hour	SO_2 – 24 hour	SO_2 – Annual
New/Mod. Source Impact	78.5	43.6	4.02
PSD Increment	512.0	91.0	20.0
% Increment Consumed	15.3	47.9	20.1
Facility Impact	78.5	43.6	4.0
Background Concentration	11.8	11.2	5.4
Total Concentration	90.3	54.8	9.4
NAAQS	1,300.0	365.0	80.0
% NAAQS	6.9	15.0	11.8

Modeling Analysis Results (All Concentrations in μg/m^3)			
	CO – 1 hour	CO – 8 hour	NO_2 – Annual
New/Mod. Source Impact	1,162.2	683.3	6.62
PSD Increment	n/a	n/a	25.0
% Increment Consumed	n/a	n/a	26.5
Facility Impact	1,162.2	683.3	6.6
Background Concentration	950.5	904.7	8.0
Total Concentration	2,112.7	1,588.0	14.6
NAAQS	40,000	10,000	100.0
% NAAQS	5.3	15.9	14.6

***Note:** 100% of the NO_x emissions are assumed converted into NO_2

D. Conclusion

The results of the modeling analysis demonstrate that the applicable air quality and increment standards will be satisfied assuming the emissions rates and stack parameters listed in the source table.

WPSC - FOX ENERGY CENTER Stack Parameters					
ID	LOCATION (UTM83)	HEIGHT (M)	DIAMETER (M)	VELOCITY (M/S)	TEMP (K)
ST01	403590, 4908129	45.72	5.79	22.61	341.9
ST02	403625, 4908109	45.72	5.79	22.61	341.9
EMERG	403630, 4908222	4.57	0.41	29.81	733.1
FIRE	403504, 4908140	4.57	0.20	15.85	722.0
AUX	403569, 4908171	30.48	1.22	9.75	436.0
S06	403699, 4908136	9.15	0.63	4.47	589.0
S07	403702, 4908130	6.25	0.63	4.47	589.0
S08	403471, 4908189	16.70	0.18	0.01	293.0

WPSC - FOX ENERGY CENTER Stack Parameters					
ID	LOCATION (UTM83)	HEIGHT (M)	DIAMETER (M)	VELOCITY (M/S)	TEMP (K)
S09	403471, 4908184	13.64	0.18	0.01	293.0
COOL1	403478, 4908406	12.20	9.80	8.50	300.0
COOL2	403478, 4908387	12.20	9.80	8.50	300.0
COOL3	403478, 4908374	12.20	9.80	8.50	300.0
COOL4	403478, 4908359	12.20	9.80	8.50	300.0
COOL5	403478, 4908344	12.20	9.80	8.50	300.0
COOL6	403478, 4908327	12.20	9.80	8.50	300.0
COOL7	403478, 4908312	12.20	9.80	8.50	300.0
COOL8	403478, 4908297	12.20	9.80	8.50	300.0
COOL9	403478, 4908283	12.20	9.80	8.50	300.0
COOL10	403478, 4908267	12.20	9.80	8.50	300.0
COOL11	403478, 4908251	12.20	9.80	8.50	300.0
COOL12	403478, 4908237	12.20	9.80	8.50	300.0

WPSC - FOX ENERGY CENTER Emission Rates				
ID	PM RATE (#/HR)	SO_2 RATE (#/HR)	NO_x RATE (#/HR)	CO RATE (#/HR)
ST01	69.05	104.3	34.76	1238.1
ST02	69.05	104.3	34.76	1238.1
EMERG	0.30	2.40	2.96*	4.08
FIRE	0.04	0.10	0.21*	0.20
AUX	0.70	0.22	4.15	4.20
S06	0.10	0.10	0.64	0.64
S07	0.10	0.10	0.64	0.64
S08	0.10	-	-	-
S09	0.10	-	-	-
COOL1	0.23	-	-	-
COOL2	0.23	-	-	-
COOL3	0.23	-	-	-
COOL4	0.23	-	-	-
COOL5	0.23	-	-	-
COOL6	0.23	-	-	-
COOL7	0.23	-	-	-
COOL8	0.23	-	-	-
COOL9	0.23	-	-	-
COOL10	0.23	-	-	-
COOL11	0.23	-	-	-
COOL12	0.23	-	-	-

Notes:

- All sources consume increment.
- The NO_x rates for EMERG and FIRE are based on 500 hours operation per year.

EMISSIONS FROM NEW EQUIPMENT OR MODIFICATION

Stack S01 - Criteria Pollutants (Stack Height = 150 ft).

	Potential to Emit (PTE)	
Pollutant	**(lb/hr)**	**(tpy)**
Nitrogen Oxides (NO_x)	45.2	185.6
Carbon Monoxide (CO)	24.0	307.6
Sulfur Dioxide (SO_2)	104.3	71.7

Stack S01 - Criteria Pollutants (Stack Height = 150 ft).

Pollutant	Potential to Emit (PTE) (lb/hr)	Potential to Emit (PTE) (tpy)
Volatile Organic Compounds (VOC)	10.1	53.5
Particulate Matter (PM) / PM_{10} / $PM_{2.5}$	68.8	142.1
Lead (Pb)	0.03	0.14
Greenhouse Gases (as CO_2e)	--	1,390,915

Stack S01 - Hazardous Air Pollutants (Stack Height = 150 ft).

Pollutant (CAS No.); s,f*	Potential to Emit (PTE) (tpy)
Ammonia (7664-41-7); s	152.0
Formaldehyde (50-00-0); s,f	4.9
Sulfuric acid mist (7664-93-9); s	10.9
Individual/Combined s. 112(b) Federal HAP	<10/25**

*s = State ch. NR 445, Wis. Adm. Code HAP, f = Federal s. 112(b) HAP

** The facility-wide PTE for each individual federal HAP is below 10 tpy and the PTE for all Federal HAP, combined, is below 25 tpy.

Stack S02 - Criteria Pollutants (Stack Height = 150 ft).

Pollutant	Potential to Emit (PTE) (lb/hr)	Potential to Emit (PTE) (tpy)
Nitrogen Oxides (NO_x)	45.2	185.6
Carbon Monoxide (CO)	24.0	307.6
Sulfur Dioxide (SO_2)	104.3	71.7
Volatile Organic Compounds (VOC)	10.1	53.5
Particulate Matter (PM) / PM_{10} / $PM_{2.5}$	68.8	142.1
Lead (Pb)	0.03	0.14
Greenhouse Gases (as CO_2e)	--	1,390,915

Stack S02 - Hazardous Air Pollutants (Stack Height = 150 ft).

Pollutant (CAS No.); s,f*	Potential to Emit (PTE) (tpy)
Ammonia (7664-41-7); s	152.0
Formaldehyde (50-00-0); s,f	4.9
Sulfuric acid mist (7664-93-9); s	10.9
Individual/Combined s. 112(b) Federal HAP	<10/25**

*s = State ch. NR 445, Wis. Adm. Code HAP, f = Federal s. 112(b) HAP

** The facility-wide PTE for each individual federal HAP is below 10 tpy and the PTE for all Federal HAP, combined, is below 25 tpy.

FACILITY AND PROJECT CLASSIFICATION

1. Project Status.

The proposed project is a minor modification to a Part 70 and PSD major source.

2. Facility Status After the Permit is Issued.

The facility will continue to be a major source under Part 70 and PSD because the potential to emit for nitrogen oxides, carbon monoxide, PM, PM_{10} and greenhouse gas emissions exceed the major source thresholds. The facility is an area source of s. 112(b) Federal HAP.

3. EPA Class Code After the Permit is Issued.

☒ **"A"** [Means the source's maximum theoretical emissions ***and*** potential to emit for one or more pollutants are greater than major source thresholds. The source is a major source (will have a FOP)];

☐ **"SM80"** [Means the source's maximum theoretical emissions of one or more pollutants are greater than major source thresholds and potential to emit is at least 80% but less than 100% of

major source thresholds. The source is a non-major source (will have a FESOP)];

☐ **"SM"** [Means the source's maximum theoretical emissions of one or more pollutants are greater than major source thresholds but potential to emit for all pollutants is less than 80% of major source thresholds. The source is a non-major source (usually will have a FESOP)];

☐ **"B"** [Means the source's maximum theoretical emissions and potential to emit for all pollutants are less than major source thresholds. The source is a non-major source (will have a SOP)].

4. Summary.

NSR Applicability	After Permit Issuance	
	Major	**Minor**
PSD	X	
Non-Attainment	n/a	
Federal HAP		X

Part 70 Applicability	Facility After Permit Issuance		
	Part 70	**FESOP (Syn. Minor)**	**non-part 70**
Status	X		

EPA Class Code	EPA Class Code After Permit Issuance			
	A	**SM80**	**SM**	**B**
Status	X			

ENVIRONMENTAL ANALYSIS

An air pollution control construction permit that does not require review under chs. NR 405 or 408, Wis. Adm. Code, is considered a minor action under s. NR 150.20(1m)(m), Wis. Adm. Code and does not require an environmental analysis.

RULE APPLICABILITY

The proposed project does not result in any change to rule applicability for the combustion turbines. Please refer to the preliminary determinations for construction permit 14-DMM-230 and operation permit 445156140-P01 for a discussion of rule applicability for the combustion turbines.

NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

For proposed construction of a source:

1. Is the proposed source in a source category for which there is an existing or proposed NSPS?
   ☐ Yes ☐ No ☒ Not applicable. (If yes, identify the source category.)
2. Is the proposed source an affected facility?
   ☐ Yes ☐ No ☒ Not applicable. (Explain if necessary to clarify.)

For the proposed modification of an existing source:

1. Is the existing source, which is being modified, in a source category for which there is an existing or proposed NSPS?
   ☒ Yes ☐ No ☐ Not applicable. *40 CFR 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines*
2. Is the existing source, which is being modified, an affected facility (prior to modification)?
   ☐ Yes ☒ No ☐ Not applicable. *Not under Subpart KKKK.*
3. Does the proposed modification constitute a modification **under NSPS** to the existing source?
   ☒ Yes ☐ No ☐ Not applicable. *It results in an increase in the SO_2 PTE.*
4. Will the existing source be an affected facility after modification?

☒ Yes ☐ No ☐ Not applicable. *Yes*

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) APPLICABILITY

Part 61 NESHAPS:

1. Will the proposed new or modified source emit a pollutant controlled under an existing or proposed NESHAPS?
   ☒ Yes ☐ No A*rsenic, benzene and beryllium from fuel combustion.*
2. Is the proposed new or modified source subject to an existing or proposed NESHAPS?
   ☐ Yes ☒ No (if yes, identify NESHAPS).

Part 63 NESHAPS:

1. Will the proposed new or modified source emit a pollutant controlled under an existing Part 63 NESHAPS?
   ☒ Yes ☐ No *Numerous HAPs from fuel combustion.*
2. Is the proposed new or modified source subject to an existing Part 63 NESHAPS?
   ☐ Yes ☒ No
3. Is the proposed project subject to s. 112(g) of the Clean Air Act?
   ☐ Yes ☒ No.

The section 112(g) rules only apply to case-by-case MACT standards that are developed for new construction or reconstruction of sources that (by themselves) constitutes a new major source of federal hazardous air pollutants (for source categories not covered under an existing Part 63 MACT standard).

CRITERIA FOR CONSTRUCTION PERMIT APPROVAL

Section 285.63, Wis. Stats., sets forth the specific language for permit approval criteria. The Department finds that:

1. The source will meet emission limitations.
2. The source will not cause nor exacerbate a violation of an air quality standard or ambient air increment.
3. The source is operating or seeks to operate under an emission reduction option. Not Applicable.
4. The source will not preclude the construction or operation of another source for which an air pollution control permit application has been received.

PRELIMINARY DETERMINATION FOR CONSTRUCTION PERMIT REVISION NO. 14-DMM-230-R1

The Wisconsin Department of Natural Resources has reviewed the construction permit revision application submitted by Wisconsin Public Service Corporation - Fox Energy Center and hereby makes a preliminary determination that this project, when constructed or modified and operated consistent with the application submitted, will be able to meet the emission limits and conditions included in the attached Draft Permit. A final decision regarding emission limits and conditions will be made after the Department has reviewed and evaluated all comments received during 21-day notice period. The proposed emission limits and other proposed conditions in the Draft Permit are written in the same form that they will appear in the construction permit. These proposed conditions may be changed as a result of public comments or further evaluation by the Department.

PERMIT FEE CALCULATION

Basic Fees.

Revision of an active construction permit.	$1,500.00
Total Basic Fees	$1,500.00

Additional Fees.

None.	$0.00
Total Additional Fee	$0.00
Total Fees (Total Basic Fees + Total Additional Fees)	$1,500.00

Credit(s).

The initial fee submitted with the application.	-$1,500.00
Total Credits	-$1,500.00
TOTAL AMOUNT DUE (Total Fee + Total Credit)	$0.00