

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 1842-AOP-R1

IS ISSUED TO:

Wrightsville Power Facility
AR State Highway 365
Wrightsville, AR 72183
Pulaski County
CSN: 60-1380

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

2/28/00

and

2/27/05

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date Amended

SECTION I: FACILITY INFORMATION

PERMITTEE:	Wrightsville Power Facility
CSN:	60-1380
PERMIT NUMBER:	1842-AOP-R1
FACILITY ADDRESS:	AR State Highway 365 Wrightsville, AR 72183
COUNTY:	Pulaski
CONTACT POSITION:	Paul R. Steinway
TELEPHONE NUMBER:	(303) 914-7501
REVIEWING ENGINEER:	Bryan Leamons
UTM North-South (X):	3,827.844
UTM East-West (Y):	571.799
Zone:	15

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SECTION II: INTRODUCTION

Summary and Process Description

The KN Power Company (“KN Power”) operates a 510 megawatt (MW) combined-cycle natural gas combustion turbine plant located in Pulaski County, 0.5 miles south of Wrightsville, Arkansas. The plant will consist of six (6) General Electric LM6000 aeroderivative turbines, one (1) General Electric Frame 7EA turbine, seven duct burners, steam turbines, an emergency diesel generator, and a cooling tower.

The plant is designed to supply approximately 450 to 510 MW of power during high electrical demand hours of each day (usually between the hours of 7:00 a.m. and 11:00 p.m.) and ramp down to approximately 75 MW during off-peak hours. This daily load cycling results in reduced power production each day during hours when there is no demand for the power.

This permit revision is a modification which incorporates provisions for the emission of Hazardous Air Pollutants (HAPs), which were inadvertently left out of the original permit. The HAPs are a subset of the VOC emissions therefore the emission change is zero. This serves only as a quantification of emissions that have been evaluated and shown in the *Ambient Air Impact Analysis* section of this permit to be compliant with the Department’s Non-Criteria Pollutant Control Strategy. See “Toxics Impact” under the *Ambient Air* section of this permit.

This modification also includes changes in impact modeling results due to altered plant layout at the facility. The changes do not trigger any modeling significance levels. See the “Significance Analysis” section of the *Ambient Air Impact Analysis* section of this permit.

Regulations

The facility is subject to regulation under the *Arkansas Air Pollution Control Code* (Air Code), the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (SIP), and the *Regulations of the Arkansas Operating Air Permit Program* (Title V) because it emits over 100 tons per year of a criteria pollutant. The facility is one of the 28 named Prevention of Significant Deterioration (PSD) source categories and is subject to regulation under 40 CFR 52.21 (PSD). KN Power is also subject to NSPS Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units; Subpart GG - Stationary Combustion Turbines; and 40 CFR Part 75 - Continuous Emission Monitoring.

Ambient Air Impact Analysis

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An air dispersion modeling analysis is a required part of a PSD permit application. The air dispersion modeling analysis is used to demonstrate that emissions from the facility will not cause or contribute to a violation of any applicable National Ambient Air Quality Standard (NAAQS) or exceed a PSD Increment. The air quality analysis is organized into two major sections for each applicable pollutant; the significance analysis and the full impact analysis. The full impact analysis is further subdivided into NAAQS and PSD Increment analyses.

SIGNIFICANCE ANALYSIS
PSD AMBIENT MONITORING REQUIREMENTS AND BACKGROUND DATA

The significance analysis considers the emissions associated only with the facility in order to determine whether or not the facility's emissions will have a significant impact upon the area surrounding the facility. If the results of the significance analysis are above the Modeling Significance Levels (MSLs) the full impact analysis will be required for that pollutant. In addition, if the results of the significance analysis are above the Monitoring De Minimis Concentration, PSD ambient monitoring requirements must also be addressed for that pollutant.

The results of the significance analysis are contained in the following table. The table is modified in this permit revision to account for altered plant lay out. The changes in modeling do not trigger any modeling significance levels.

Maximum Predicted Concentrations in Comparison with
Modeling Significance Levels (MSL) and Monitoring De Minimis Concentrations

Pollutant	Averaging Period	Concentration (Fg/m ³)	Modeling Significance Level (Fg/m ³)
PM ₁₀	24-hour	4.88	5
	Annual	0.28	1
CO	1-hour	342.31	2000
	8-hour	140.16	500
SO ₂	3-hour	1.41	25
	24-hour	0.77	5
	Annual	0.057	1
NO _x	Annual	0.73	1

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The maximum impacts of NO_x, PM₁₀ and SO₂ occurred under the worst-case load scenario (60 percent turbine load), and maximum impacts of CO occurred during the startup scenario. All off-site ambient impacts associated with operations of the proposed facility are below the respective MSL, and the facility is thus compliant with all corresponding National Ambient Air Quality Standards (NAAQS) and Class II PSD increment analysis.

ADDITIONAL IMPACTS ANALYSIS

An additional impacts analysis is completed based on existing air quality, the quantity of emissions, and the sensitivity of local soils, vegetation, and visibility in the facility's area of impact. The additional impact analysis consists of three parts: (1) growth, (2) soils and vegetation impacts, and (3) visibility impairment.

Growth

The growth analysis is intended to quantify the amount of new growth that is likely to occur in support of the facility and to estimate emissions resulting from the associated growth. Associated growth includes residential and commercial/industrial growth resulting from the new facility. Residential growth depends on the number of new employees and the availability of housing in the area, while associated commercial and industrial growth consists of new sources providing services to the new employees and the facility. The number of new permanent jobs created by the project is expected to be approximately five. To the extent possible, these jobs will be filled from the local labor pool. Accordingly, negligible new growth is anticipated as a result of the new facility.

Soils and Vegetation Analysis

The soils and vegetation analysis is based on an inventory of soils and vegetation types with commercial or recreational value found in the impact area. The impact area is defined as the maximum distance from the facility at which ambient impacts from the source exceed the MSL. Because the impacts associated with the operation of the proposed facility are below all applicable MSL, no impact area exists that is associated with the project. Impacts to soils and vegetation resulting from operation of the proposed facility are thus expected to be negligible.

Visibility Impairment Analysis

A visibility impairment analysis is required to assess visibility impacts in Class I areas located within 100 kilometers of the proposed facility. There are no Class I areas within 100 kilometers of the proposed facility. No visibility analysis was thus conducted. Furthermore, visibility impacts are expected to be negligible because impacts of all modeled pollutants are below the MSL and, by definition, insignificant.

TOXICS IMPACT

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The Presumptively Acceptable Impact Level (PAIL) is the maximum ambient 24-hour average concentration, for Hazardous Air Pollutants (HAPs) only, less than or equal to 1/100th of the Threshold Limit Value (TLV) or an acceptable concentration that has been established by the Department for each substance emitted. The ambient concentration resulting from the proposed emission rate of a substance is determined by using atmospheric dispersion models to obtain the maximum ambient, ground level concentration expressed as a 24-hour average.

An analysis was conducted to determine if emission rates of non-criteria pollutants associated with the KN Power plant would trigger dispersion modeling requirements for any specific non-criteria pollutants. The analysis was conducted according to the Non-Criteria Pollutant Control Strategy. Contaminants with emission rates less than the Presumptively Acceptable Emission Rate (PAER) are exempt from dispersion modeling. Emission rates and PAER's for non-criteria pollutants associated with the facility are presented in the following table. As the table shows, all except formaldehyde emission rates are below the respective PAER, precluding the need for dispersion modeling for any non-criteria pollutant emissions associated with the project.

HAP	Emission Rate (lb/hr)	TLV (mg/m ³)	PAER* (lb/hr)	Modeling Required**
Formaldehyde	2.24	1.5	0.165	YES
Acrolein	0.032	0.23	0.025	NO
PAH***	0.0108	52	5.72	NO

* PAER is the TLV of the HAP times 0.11

**If the proposed lb/hr is less than the PAER then no further modeling is required.

*** PAH is modeled as naphthalene

This analysis shows that all non-criteria pollutants passed the first level of modeling except formaldehyde. It is modeled with ISCST3 dispersion methods to show compliance with the Presumptively Acceptable Impact Level (PAIL). PAIL is the maximum ambient 24-hour average concentration, for Hazardous Air Pollutants (HAPs), less than or equal to 1/100th of the Threshold Limit Value (TLV) or an acceptable concentration that has been established by the Department for each substance emitted. The ambient concentration resulting from the proposed emission rate of a substance is determined by using atmospheric dispersion models to obtain the maximum ambient, ground level concentration expressed as a 24-hour average.

HAP	Emission Rate (lb/hr)	TLV (mg/m ³)	PAIL (Fg/m ³)	ISCST3 Result	Pass
formaldehyde	2.23	1.5	15	1.016	YES

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Emission Summary

The following table is a summary of emissions from the facility. Specific conditions and emissions for each source can be found starting on the page cross referenced in the table.

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy*	
Total Allowable Emissions		PM	43.2	185.3	NA
		PM ₁₀	42.0	180.2	
		SO ₂	3.8	13.2	
		VOC	17.6	74.0	
		CO	612.9	818.6	
		NO _x	418.1	619.0	
		acrolein	0.04	0.14	
		formaldehyde	2.24	9.79	
		PAH	0.01	0.05	
01	LM6000 Combustion Turbine with Duct Burner	PM	5.2	177.0	12
		PM ₁₀	5.2	177.0	
		SO ₂	0.4	13.0	
		VOC	2.1	73.6	
		CO	79.0	815.8	
		NO _x	56.0	607.0	
		acrolein	0.01	0.14	
		formaldehyde	0.28	9.79	
		PAH	0.01	0.05	
02	LM6000 Combustion Turbine with Duct Burner	PM	5.2		12
		PM ₁₀	5.2		
		SO ₂	0.4		
		VOC	2.1		
		CO	79.0		
		NO _x	56.0		
		acrolein	0.01		
		formaldehyde	0.28		
		PAH	0.01		

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy*	
03	LM6000 Combustion Turbine with Duct Burner	PM	5.2		12
		PM ₁₀	5.2		
		SO ₂	0.4		
		VOC	2.1		
		CO	79.0		
		NO _x	56.0		
		acrolein	0.01		
		formaldehyde	0.28		
		PAH	0.01		
04	LM6000 Combustion Turbine with Duct Burner	PM	5.2		12
		PM ₁₀	5.2		
		SO ₂	0.4		
		VOC	2.1		
		CO	79.0		
		NO _x	56.0		
		acrolein	0.01		
		formaldehyde	0.28		
		PAH	0.01		
05	LM6000 Combustion Turbine with Duct Burner	PM	5.2		12
		PM ₁₀	5.2		
		SO ₂	0.4		
		VOC	2.1		
		CO	79.0		
		NO _x	56.0		
		acrolein	0.01		
		formaldehyde	0.28		
		PAH	0.01		
06	LM6000 Combustion Turbine with Duct Burner	PM	5.2		12
		PM ₁₀	5.2		
		SO ₂	0.4		
		VOC	2.1		
		CO	79.0		
		NO _x	56.0		
		acrolein	0.01		
		formaldehyde	0.28		
		PAH	0.01		

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy*	
07	7EA Frame Combustion Turbine with Duct Burner	PM	9.2		12
		PM ₁₀	9.2		
		SO ₂	0.8		
		VOC	4.2		
		CO	132		
		NO _x	52.0		
		acrolein	0.01		
		formaldehyde	0.56		
08	Emergency Diesel Generator	PAH	0.01		28
		PM	0.9	0.4	
		PM ₁₀	0.9	0.4	
		SO ₂	0.6	0.2	
		VOC	0.8	0.4	
		CO	6.9	2.8	
		NO _x	30.1	12.0	
09	Cooling Towers	PM	1.9	7.9	30
		PM ₁₀	0.7	2.8	

*tpy emissions for SN-01 thru SN-07 are based on a worst case scenario so that the facility may operate any combination of turbines at any time within the tpy restriction.

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SECTION III: EMISSION UNIT INFORMATION

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SN-01 through SN-07
Combustion Turbines with Duct Burners

Source Description

SN-01 through SN-07 each represent a combined cycle combustion turbine with a duct burner.

Combustion Turbines: Six of the seven combustion turbines (SN-01 through SN-06) will be General Electric LM6000's and fired solely on pipeline natural gas. Each LM6000 combustion turbine has a nominal electric production rating of 46 MW. One of the seven combustion turbines (SN-07) will be a General Electric Frame 7EA. All turbines will be fired solely on pipeline natural gas. The 7EA has a nominal electric production rating of 80 MW.

Combustion Turbine Operating Scenarios: The typical operating scenario for each LM 6000 combustion turbine system will be for the combustion turbine to operate near or at 100% of the design capacity. The typical operating scenario for the 7EA combustion turbine system will be for the combustion turbine to operate between 60% to 100% of the design capacity.

Comparison of BACT and NSPS Subpart GG Limits for the Combustion Turbines:

The combustion turbines will be subject to NSPS Subpart GG. Control technologies in the BACT analysis must meet applicable NSPS requirements to be considered viable. The BACT emission limits for each combustion turbine are more stringent than or equal to applicable NSPS requirements.

Emissions Unit	Pollutant	BACT*	NSPS
Each LM6000 (SN-01 - SN-06)	SO ₂	N/A	0.8% sulfur by weight
Frame 7EA (SN-07)			
Each LM6000 (SN-01 - SN-06)	NO _x	22 ppmvd @ 15% O ₂	113.8 ppmvd @15% O ₂
Frame 7EA (SN-07)		9 ppmvd @ 15% O ₂	96.6 ppmvd @15% O ₂

*the BACT emission factors include emissions from the combustion turbine only.

N/A - SO₂ did not go through BACT review and therefore is not subject to BACT limits.

Duct Burners: Each duct burner will be fired solely on pipeline natural gas and will add supplemental heat to the heat recovery steam generator.

Duct Burner Operating Scenario: The duct burner will use combustion turbine exhaust as the combustion air supply. Consequently, the duct burner cannot operate if the combustion turbine is not operating.

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Comparison of BACT and NSPS Subpart Db limits for the Duct Burner: The duct burner will be subject to NSPS Subpart Db. Control technologies in the BACT analysis must meet applicable NSPS requirements to be considered viable. The BACT emission limits for each duct burner are more stringent than or equal to applicable NSPS requirements.

Pollutant	BACT-(Duct Burner Only)	NSPS - (Duct Burner only)
NO _x	0.09lb/MMBtu	0.20 lb/MMBtu

Emission Limits: Each combustion turbine/duct burner set will be exhausted through a single stack, for a total of seven stacks.

BACT Summary for the Combustion Turbine with Duct Burner

Emission Unit	Pollutant	BACT Determination	
Each LM6000 Combustion Turbine with Duct Burner (SN-01 - SN-06)	PM ₁₀	combustion of pipeline natural gas	0.011 lb/MMBtu
	VOC	good combustion practices	0.005 lb/MMBtu
	CO	good combustion practices	66 ppmvd @ 15% O ₂
	NO _x	steam injection into the turbine combustion process	22 ppmvd @ 15% O ₂ * 0.09 lb/MMBtu**
7EA Combustion Turbine with Duct Burner (SN-07)	PM ₁₀	combustion of pipeline natural gas	0.010 lb/MMBtu
	VOC	good combustion practices	0.005 lb/MMBtu
	CO	good combustion practices	50 ppmvd @ 15% O ₂
	NO _x	dry-low NO _x turbine combustor	9 ppmvd @ 15% O ₂ * 0.09 lb/MMBtu**
All Seven Combustion Turbines with Duct Burners (SN-01 - SN-07)	CO	good combustion	815.8 tpy
	NO _x	low NO _x	607.0 tpy

*the BACT emission factor includes emissions from the combustion turbine only.

** the BACT emission factor includes emissions from the duct burner only.

Specific Conditions

Particulate Matter and Opacity

- Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control, effective February 15, 1999 (Regulation

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#19), and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for PM/PM₁₀. The hourly emission rates set forth in the following table are based on a worst-case scenario.

Sources	Pollutant	lb/hr
Each LM6000 Combustion Turbine with Duct Burner (SN-01 through SN-06)	PM ₁₀	5.2
7EA Combustion Turbine with Duct Burner (SN-07)	PM ₁₀	9.2

2. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for PM/PM₁₀. The hourly emission rates set forth in the following table are based on a worst-case scenario.

Sources	Pollutant	lb/hr
Each LM6000 Combustion Turbine with Duct Burner (SN-01 through SN-06)	PM	5.2
7EA Combustion Turbine with Duct Burner (SN-07)	PM	9.2

3. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the annual emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for PM/PM₁₀. The annual emission rates set forth in the following table are based on a maximum lb/hr times 8760 hr/yr.

Sources	Pollutant	Tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	PM ₁₀	177

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4. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the annual emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for PM/PM₁₀. The annual emission rates set forth in the following table are based on a maximum lb/hr times 8760 hr/yr.

Sources	Pollutant	Tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	PM	177

5. Pursuant to §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the emission factors set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for PM₁₀.

Sources	Pollutant	BACT Determination	
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	PM ₁₀	combustion of clean fuels	0.011 lb/MMBtu
7EA Combustion Turbine with Duct Burner (SN-07)	PM ₁₀	combustion of clean fuels	0.010 lb/MMBtu

6. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the Combustion Turbine / Duct Burner stack gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by the use of natural gas.
7. Pursuant to §19.702 and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform a stack test on one-half of each type of Combustion Turbine / Duct Burner stack (SN-01 thru SN-07) for PM/PM₁₀ to demonstrate compliance with the limits specified in Specific Conditions 1, 3, and 5. Testing shall be performed every five

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years in accordance with Plantwide Condition 3 and EPA Reference Method 5 as found in 40 CFR Part 60 Appendix A (or alternative methods as pre-approved by the Director). Testing shall be performed at or near the maximum operating load. The Department reserves the right to select the turbine/duct burner to be tested. The testing shall be rotated so that all turbines/duct burner stacks are tested by the end of the first 5-year test cycle.

Sulfur Dioxide

8. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated by the use of natural gas and Specific Condition 9.

Sources	Pollutant	lb/hr	tpy
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	SO ₂	0.4*	13
7EA Combustion Turbine with Duct Burner (SN-07)		0.8*	

*This mass emissions rate is derived from the emission factor provided in 40 CFR Part 75, Appendix D (i.e., 0.0006 lb SO₂/MMBtu).

9. Pursuant to §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, NSPS Subpart GG, 40 CFR Part 75 Subpart B, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, monitoring requirements relative to SO₂ emissions from the Combustion Turbine and Duct Burner shall be as follows:
- A. The permittee shall conduct SO₂ emissions monitoring procedures in accordance with Specific Condition 28(C).
 - B. The permittee shall maintain records which demonstrate compliance with the above condition.

Volatile Organic Compounds

10. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner

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stack for VOC. The hourly emission rates set forth in the following table are based on a worst-case scenario.

Sources	Pollutant	lb/hr
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	VOC (as C3)	2.1
7EA Combustion Turbine with Duct Burner (SN-07)	VOC (as C3)	4.2

11. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the annual emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for VOC. The annual emission rates set forth in the following table are based on a maximum lb/hr times 8760 hr/yr.

Sources	Pollutant	tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	VOC (as C3)	73.6

12. Pursuant to §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the emission factors set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for VOC.

Sources	Pollutant	BACT Determination	
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	VOC (as C3)	Good combustion practices	0.005 lb/MMBtu
7EA Combustion Turbine with Duct Burner (SN-07)	VOC (as C3)	Good combustion practices	0.005 lb/MMBtu

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13. Pursuant to §19.702 and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform a stack test on one-half of each type of Combustion Turbine / Duct Burner stack (SN-01 thru SN-07) for VOC to demonstrate compliance with the limits specified in Specific Conditions 10, 11, and 12. Testing shall be performed every five years in accordance with Plantwide Condition 3 and EPA Reference Method 25A as found in 40 CFR Part 60 Appendix A (or alternative methods as pre-approved by the Director). Testing shall be performed at or near the maximum operating load. The Department reserves the right to select the turbine/duct burner to be tested. The testing shall be rotated so that all turbines/duct burner stacks are tested by the end of the first 5-year test cycle.

Carbon Monoxide

14. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Each Combustion Turbine/Duct Burner stack (SN-01 thru SN-07) will be monitored by CO CEMS. The CEMS data shall be used to demonstrate compliance with the hourly emission rates set forth in the following table.

Sources	Pollutant	lb/hr, using a 3-hr average
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	CO	79.0
7EA Combustion Turbine with Duct Burner (SN-07)	CO	132.0

15. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Each Combustion Turbine/Duct Burner stack will be monitored by CO CEMS. The CEMS data shall be used to demonstrate compliance with the annual emission rate set forth in the following table.

Source	Pollutant	tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	CO	815.8

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16. Pursuant to §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the emission factors set forth in the following table shall be demonstrated by the initial performance testing of the Combustion Turbine and Duct Burner for CO.

Sources	Pollutant	BACT Determination
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	CO	66 ppmvd @ 15% O ₂ , 3-hr average
7EA Combustion Turbine with Duct Burner		50 ppmvd @ 15% O ₂ , 3-hr average

17. Pursuant to §19.702 and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform an initial stack testing of the Combustion Turbine and Duct Burner for CO to demonstrate compliance with all limits specified in Specific Conditions 14 and 16. Testing shall be performed in accordance with Plantwide Condition 3 and EPA Reference Method 10 as found in 40 CFR Part 60 Appendix A (or alternative methods as pre-approved by the Director). Testing shall be performed at or near the maximum operating load.
18. Pursuant to §19.703 and §19.901 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate CO CEMS to monitor emissions from each Combustion Turbine/Duct Burner stack. The measured concentrations of CO and O₂ in the flue gas along with the measured fuel flow shall be used to calculate CO mass emissions. The CEMS data may be used by the Department for enforcement purposes. The CEMS shall be used to demonstrate compliance with the CO mass emission limits and emission factors specified in Specific Conditions 15 and 16.

Nitrogen Oxides

19. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Each Combustion Turbine/Duct Burner stack (SN-01 thru SN-07) will be monitored by NO_x CEMS. The CEMS data shall be used to demonstrate compliance with the hourly emission rates set forth in the following table.

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Sources	Pollutant	lb/hr, using a 24-hr average
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	NO _x	56.0
7EA Combustion Turbine with Duct Burner (SN-07)	NO _x	52.0

20. Pursuant to §19.501 et seq and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Each Combustion Turbine/Duct Burner stack will be monitored by NO_x CEMS. The CEMS data shall be used to demonstrate compliance with the annual emission rate set forth in the following table.

Sources	Pollutant	tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	NO _x	607.0

21. Pursuant to §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the 3-hr average emission factors set forth in the following table shall be demonstrated by the initial performance testing of the Combustion Turbine and Duct Burner for NO_x.

Sources	Pollutant	BACT Determination
Each LM6000 Combustion Turbine* (SN-01 thru SN-06)	NO _x	22 ppmvd @ 15% O ₂ using a rolling 12 month avg. 25 ppmvd @ 15% O ₂ using a 3 hr avg.
7EA Combustion Turbine (SN-07)*		9 ppmvd @ 15% O ₂ using a 3 hr average
Each Duct Burner (SN-01 thru SN-07)	NO _x	0.09 lb/MMBtu using a 3 hr average**

* the BACT emission factors include emissions from the combustion turbine only.

** the BACT emission factors include emissions from the duct burner only.

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22. Pursuant to §19.702 and §19.901 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform an initial stack test on all Combustion Turbines and Duct Burners for NO_x to demonstrate compliance with the limits specified in Specific Conditions 19 and 21 (except for the LM6000 22ppm long term average). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E or 20 as found in 40 CFR Part 60 Appendix A. Testing shall be performed at or near the maximum operating load.
23. Pursuant to §19.703 and §19.901 et seq of Regulation #19, 40 CFR Part 52 Subpart E, NSPS Subpart GG, 40 CFR Part 75 Subpart B, and A.C.A. §8-4-203 as referenced by §8-3-304 and §8-4-311, monitoring requirements relative to NO_x emissions from the Combustion Turbine and Duct Burner shall be as follows:
- A. The permittee shall install, calibrate, maintain, and operate NO_x CEMS to monitor emissions from each Combustion Turbine/Duct Burner stack in accordance with Specific Condition 28(D). The CEMS data may be used by the Department for enforcement purposes. The CEMS shall be used to demonstrate compliance with the NO_x mass emission limits specified in Specific Conditions 19 and 20.
- B. The permittee shall maintain records which demonstrate compliance with the above condition.
24. Pursuant to §19.901 of Regulation 19 et seq, and 40 CFR Part 52, Subpart E, CEMS shall be used to demonstrate compliance with the ppm limits listed in Specific Condition 21, except during periods of duct firing. During those periods of turbine/duct firing, compliance with emission factors set forth in Specific Condition 21 shall demonstrated by complying with Specific Condition 19.

HAPs

25. Pursuant to §18.801 of Regulation 18 and A.C.A., the permittee shall not exceed lb/hr emission rates listed in the following table at SN-01 through SN-07. Initial compliance shall be determined by testing requirements of Specific Condition 27. Ongoing compliance with emission rates shall be demonstrated by the exclusive use of pipeline quality natural gas.

Source Number	Pollutant	pound per hour	averaging period
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01 through 06 (separately)	formaldehyde acrolein PAH	0.28 0.01 0.01	per method 18
07	formaldehyde acrolein PAH	0.56 0.01 0.01	per method 18

26. Pursuant to §18.801 of Regulation 18 and A.C.A., the permittee shall not exceed ton per year emission rates listed in the following table SN-01 through SN-07 combined. Initial compliance shall be demonstrated by Specific Condition 27. Ongoing compliance shall be determined by compliance with and the exclusive use of pipeline quality natural gas.

Pollutant	ton per 12 consecutive months
formaldehyde	9.79
acrolein	0.14
PAH	0.05

27. Pursuant to §18.1002 and A.C.A., the permittee shall conduct an initial performance test on any one of SN-01 through SN-06 and SN-07 using Method 18 (or alternative methods as pre-approved by the Director) for all detectable HAPs concentrations. The test shall be performed while operating at greater than 90% of capacity. At this time the permittee shall also demonstrate that the facility is not a major source for HAPs (i.e. 10 tpy single HAP or 25 tpy total HAPs facility wide) and is therefore not subject to requirements of the Clean Air Act §112(g). Testing shall be performed in accordance with Plantwide Condition 3.

Throughput Limitations

28. Pursuant to §18.1004 of Regulation #18, §19.705 and §19.901 et seq of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR §70.6, and 40 CFR Part 75, each combustion turbine and each duct burner may only fire pipeline natural gas.
29. Pursuant to §18.1004 of Regulation #18, §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 75, the permittee shall maintain records to demonstrate compliance with Specific Condition 28. These records shall be a copy of the page or pages that contain the gas quality characteristics specified in either a purchase contract or pipeline transportation

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contract. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

Hourly Emissions

30. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the hourly emission rates and emission factors listed in this permit do not apply during start-up and shut down periods. The permittee shall report all such events in accordance with chapter 6 of Regulation 19.

New Source Performance Standards (NSPS)

31. Each combustion turbine is subject to and shall comply with applicable provisions of 40 CFR Part 60 Subpart A – General Provisions and 40 CFR Part 60 Subpart GG – Standards of Performance for Stationary Gas Turbines. Applicable provisions of Subpart GG include, but are not limited to, the following:
- A. Pursuant to 40 CFR §60.332(a)(1), NO_x emissions from each LM6000 shall not exceed 113.8 ppmvd at 15% O₂. Pursuant to 40 CFR §60.332(a)(1), NO_x emissions from the 7EA shall not exceed 96.6 ppmvd at 15% O₂. Initial compliance with this condition shall be demonstrated by complying with Specific Condition 21.
 - B. Pursuant to 40 CFR §60.333(b), the permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight. Compliance with this condition shall be demonstrated by Specific Condition 31(C).
 - C. The permittee shall conduct the following fuel monitoring as an alternative to 40 CFR 60.334(b) and 40 CFR 60.335(a) and (d);
 - i. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
 - ii. The documentation requirements for natural gas in §2.3.1.4 and the procedures for sulfur content determination in §2.3.3.1 of Appendix D to 40 CFR Part 75 shall be used to monitor the fuel sulfur content. The documentation requirements include the records described in Specific Condition 29. The procedures for sulfur content determination include, measuring pipeline natural gas fuel flow rate using an in-line fuel flow meter, determining the gross calorific value of the pipeline natural gas at

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least once per month, and using the default emission rate of 0.0006 pounds of SO₂ per million Btu of heat input.

- iii. The permittee shall notify the Department if the sulfur fuel monitoring conducted per Specific Condition 31(C)(ii), indicates noncompliance with Specific Condition 31(B).
- D. The permittee shall conduct the following NO_x monitoring and testing as an alternative to 40 CFR 60.334(a) and 40 CFR 60.335(c)(2) and (c)(3):
- i. The permittee shall install, calibrate, maintain, and operate NO_x CEMS to monitor emissions from each Combustion Turbine/Duct Burner stack. The CEMS shall comply with 40 CFR Part 75. The permittee shall use the measured concentrations of NO_x and O₂ in the flue gas along with the measured fuel flow (or another 40 CFR Part 75 procedure) to calculate NO_x mass emissions.
 - ii. The NO_x CEMS must be capable of calculating 1-hour and 3-hour average NO_x emissions concentrations corrected to 15% O₂.
 - iii. The permittee shall submit reports of excess emissions as required in 40 CFR 60.7(c) and summary reports as required in 40 CFR 60.7(d). Excess emissions are defined as all periods when the consecutive 3-hour average concentration is greater than the limit in Specific Condition 31(A).
 - iv. The permittee shall conduct initial performance in accordance with Specific Condition 22.
32. The duct burners are subject to and shall comply with applicable provisions of 40 CFR Part 60 Subpart A – General Provisions and 40 CFR Part 60 Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. A copy of Subpart Db is provided in Appendix C. Applicable provisions of Subpart Db include, but are not limited to, the following:
- A. Pursuant to 40 CFR §60.44b(a)(4)(i), NO_x emissions shall not exceed 0.2 lb/MMBtu heat input. Initial compliance with this condition shall be demonstrated by complying with Specific Condition 21.

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- B. Pursuant to 40 CFR §60.46b(a), the nitrogen oxides emission standards under §60.44b apply at all times, this includes periods of startup, shutdown, and malfunction.
 - C. Pursuant to 40 CFR §60.46b(f), to determine compliance with the emission limit for nitrogen oxides required by 40 CFR §60.44b(a)(4) for duct burners, the owner or operator of the facility shall conduct a performance test required under 40 CFR §60.8 using the nitrogen oxides and oxygen measurement procedures in 40 CFR part 60 appendix A, Method 20. During the performance test, one sampling site shall be located as close as practicable to the exhaust of the turbine; as provided by 6.1.1 of Method 20. A second sampling site shall be located at the outlet to the steam generating unit. Measurements of nitrogen oxides and oxygen shall be taken at both sampling sites during the performance test. The nitrogen oxides emission rate from the combined cycle system shall be calculated by subtracting the nitrogen oxides emission rate measured at the sampling site and at the outlet from the turbine from the nitrogen oxides emission rate measured at the sampling site at the outlet from the steam generating unit.
 - D. Pursuant to 40 CFR §60.49b(d), the owner shall record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor individually for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
 - E. Pursuant to 40 CFR §60.49b(o), all records required under the section shall be maintained by the owner or operator of the facility for a period of 2 years following the date of such record.
33. Pursuant to 40 CFR §60.7(a), the following notifications to the Department are required for the combustion turbines and the duct burners: (a) date of construction commenced postmarked no later than 30 days after such date, (b) anticipated date of initial start-up between 30-60 days prior to such date, (c) actual date of initial start-up postmarked within 15 days after such date, and (d) CEMS, opacity, and emissions performance testing postmarked not less than 30 days prior to testing.

Acid Rain Program

34. The affected units (SN-01 thru SN-07) are subject to and shall comply with applicable provisions of the Acid Rain Program (40 CFR Parts 72, 73, and 75).

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35. Pursuant to 40 CFR Part 75 – Continuous Emission Monitoring Subpart G, the submission of the NO_x, SO₂, and O₂ or CO₂ monitoring plans and notice of CEMS initial certification testing is required at least 45 days prior to the CEMS initial certification testing.
36. Pursuant to 40 CFR Part 75 – Continuous Emission Monitoring Subpart G, a monitoring plan is required to be submitted for NO_x, SO₂, and O₂ or CO₂ monitoring. The plan will be pending approval by the EPA for all pollutants.
37. Pursuant to 40 CFR Part 75(b)(2) Subpart A, the initial NO_x, SO₂, and O₂ or CO₂ CEMS certification testing is to occur no later than 90 days after the date the unit commences commercial operation.
38. Pursuant to 40 CFR §75.10, the permittee shall ensure that the continuous emissions monitoring systems are in operation and monitoring all unit emissions at all times, except during periods of calibration, quality assurance, preventative maintenance or repair, periods of backups of data from the data acquisition and handling system, or recertification.

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SN-08
Emergency Diesel Generator

Source Description

The emergency diesel generator will consist of a diesel fueled internal combustion engine and an electrical generator. The generator will have an nominal rating of 850 kW and will be permitted to operate 800 hours per year.

Specific Conditions

39. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control, effective February 15, 1999 (Regulation #19), and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rate set forth in the following table. The hourly emission rate set forth in the following table is based on maximum capacity. Compliance with the tpy emission rate set forth in the following table shall be demonstrated by specific conditions 42 and 43.

Emission Unit	Pollutant	lb/hr	tpy
Emergency Diesel Generator	PM	0.9	0.4
	PM ₁₀	0.9	0.4
	SO ₂	0.6	0.2
	VOC	0.8	0.4
	CO	6.9	2.8
	NO _x	30.1	12.0

40. Pursuant to §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall not cause to be discharged to the atmosphere from the emergency diesel generator stack gases which exhibit an opacity greater than 20%.
41. Pursuant to §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, an initial observation of the opacity from source SN-08 shall be conducted by a person trained in EPA Reference Method 9 and repeated every 5 years. If visible emissions appear to be in excess of 20%, the permittee shall immediately take action to identify the cause of the excess visible emissions, implement corrective action, and document that visible emissions do not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records of any visible emissions which appeared to be in excess of the permitted opacity, the corrective action taken, and if visible emissions were present following the corrective action. These records shall be kept on site and made available to Department personnel upon request.

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42. Pursuant to §18.1004 of Regulation #18, §19.705 and §19.901 et seq of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §70.6, the emergency diesel generator may only fire low sulfur diesel fuel.
43. Pursuant to §18.1004 of Regulation #18, §19.705 and §19.901 et seq of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §70.6, operation of the emergency diesel generator shall be limited to 800 hours per twelve consecutive months. Compliance shall be based on a monthly calculation of the 12-month rolling total operating hours.
44. Pursuant to §18.1004 of Regulation #18, §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records to demonstrate compliance with specific conditions 42 and 43. These records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

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SN-09
Cooling Tower

Source Description

The cooling towers will consist of mechanical draft vents with drift eliminators.

Specific Conditions

45. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control, effective February 15, 1999 (Regulation #19), and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rate set forth in the following table. The emission rates set forth in the following table are based on maximum capacity.

Emission Unit	Pollutant	lb/hr (24-hr average)	tpy
Cooling Tower	PM	1.9	7.9
	PM ₁₀	0.7	2.8

46. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the cooling tower stack gases which exhibit an opacity greater than 20%. Compliance with this opacity limit shall be demonstrated by Specific Condition 47.
47. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the total dissolved solids content shall not exceed 4000 parts per million.
48. Pursuant to §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall monitor weekly the total dissolved solids to demonstrate compliance with Specific Condition 47. These records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

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SECTION IV: COMPLIANCE PLAN AND SCHEDULE

KN Power Company - KN Power has not yet constructed the Wrightsville Power facility, hence an assessment of its compliance status is inapplicable at this time. Upon commencement of operation, the KN Power Company - Wrightsville Power Facility will operate in compliance with those applicable regulatory provisions. In addition, the facility shall comply in a timely manner with new applicable requirements that become effective during the operating permit term.

SECTION V: PLANTWIDE CONDITIONS

1. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance if the work involved in the construction or modification is suspended for a total of 18 months or more.
3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 - A. Sampling ports adequate for applicable test methods
 - B. Safe sampling platforms
 - C. Safe access to sampling platforms
 - D. Utilities for sampling and testing equipment
5. Pursuant to §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall submit, for the Department's approval, a CEMS protocol at least 60 days in advance of the installation of any CEMS.
6. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring

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equipment shall be operated within their design limitations and maintained in good condition at all times.

7. Pursuant to §18.801 of Regulation #18, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
8. Pursuant to §18.901(A) of Regulation #18, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.

Acid Rain (Title IV)

9. Pursuant to §7(a) of Regulation #26 and 40 CFR 70.6(a)(4), the permittee is prohibited from causing any emissions which exceed any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement of this permit or the Act. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.

Title VI Provisions

10. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - A. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - B. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - C. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.

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- D. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
11. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- A. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - B. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - C. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - D. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” as defined at §82.152.)
 - E. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - F. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
12. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
13. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.
14. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP)

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promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

Permit Shield

15. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in item A of this condition.

- A. The following have been specifically identified as applicable requirements based upon information submitted by the permittee in an application dated April 29, 1999 and subsequent correspondence.

Source	Regulation	Description
Facility	Arkansas Regulation #19	Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Facility	Arkansas Regulation #26	Regulations of the Arkansas Operating Permit Program
Facility	40 CFR §52.21	Prevention of Significant Deterioration
SN-01 - SN-07	40 CFR Parts 72, 73, and 75	The Acid Rain Program
SN-01 - SN-07	40 CFR Part 60 Subpart A	General Provisions
SN-01 - SN-07	40 CFR Part 60 Subpart GG	Standards of Performance for Stationary Gas Turbines
SN-01 - SN-07	40 CFR Part 60 Subpart Db	New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units

- B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in an application dated April 29, 1999 and subsequent correspondence.

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Compliance Assurance Monitoring	40 CFR Part 64	SN-01 - SN-07	Because none of the emission units use a control device as defined under Part 64.

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Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Compliance Assurance Monitoring	40 CFR Part 64	SN-08 - SN-09	Because none of the emission units have a potential pre-control device emissions in the amounts of tons per year required to classify the unit as a major source under Part 70.
National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	40 CFR Part 63 Subpart Q	Cooling Tower (SN-09)	The facility will not be a major source of HAPs. The facility will not operate the cooling tower with chromium based water treatment chemicals.
Portion of the Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.	40 CFR 60.49b(g) and (b)	Duct Burners (SN-01 - SN-07)	Pursuant to 40 CFR 60.48b(h) a continuous monitoring system for NOx is not required for the duct burners. Therefore these two paragraphs do not apply because the provisions are applicable to affected facilities required to install a continuous monitoring system.

C. Nothing in this permit shall alter or affect the following:

Provisions of Section 303 of the Clean Air Act;

The liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance;

The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; or

The ability of the EPA to obtain information under Section 114 of the Clean Air Act.

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SECTION VI: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in a letter dated February 20, 2002.

Description	Category
Natural Gas Fired Fuel Heater (9.9 MM Btu/hr)	A-1

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

SECTION VII: GENERAL PROVISIONS

1. Pursuant to 40 C.F.R. 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to 40 C.F.R. 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
3. Pursuant to §26.4 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
4. Pursuant to 40 C.F.R. 70.6(a)(1)(ii) and §26.7 of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(A) and §26.7 of Regulation #26, records of monitoring information required by this permit shall include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;

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- e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
- 6. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(B) and §26.7 of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- 7. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(A) and §26.7 of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

- 8. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the occurrence. The initial report may be made by telephone and shall include:
 - a. The facility name and location,
 - b. The process unit or emission source which is deviating from the permit limit,
 - c. The permit limit, including the identification of pollutants, from which deviation occurs,
 - d. The date and time the deviation started,
 - e. The duration of the deviation,
 - f. The average emissions during the deviation,
 - g. The probable cause of such deviations,

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- h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
- i. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence and such report will serve as both the initial report and full report.

- 9. Pursuant to 40 C.F.R. 70.6(a)(5) and §26.7 of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
- 10. Pursuant to 40 C.F.R. 70.6(a)(6)(i) and §26.7 of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- 11. Pursuant to 40 C.F.R. 70.6(a)(6)(ii) and §26.7 of Regulation #26, it shall not be a defense for a 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.

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12. Pursuant to 40 C.F.R. 70.6(a)(6)(iii) and §26.7 of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
13. Pursuant to 40 C.F.R. 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
14. Pursuant to 40 C.F.R. 70.6(a)(6)(v) and §26.7 of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.
15. Pursuant to 40 C.F.R. 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
16. Pursuant to 40 C.F.R. 70.6(a)(8) and §26.7 of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.
17. Pursuant to 40 C.F.R. 70.6(a)(9)(i) and §26.7 of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
18. Pursuant to 40 C.F.R. 70.6(b) and §26.7 of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.

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19. Pursuant to 40 C.F.R. 70.6(c)(1) and §26.7 of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
20. Pursuant to 40 C.F.R. 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
 - a. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.
21. Pursuant to 40 C.F.R. 70.6(c)(5) and §26.7 of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.
22. Pursuant to §26.7 of Regulation #26, nothing in this permit shall alter or affect the following:

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- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D

INVOICE REQUEST FORM

PDS-_____

Date August 29, 2001

<input checked="" type="checkbox"/>	Air
<input type="checkbox"/>	NPDES
<input type="checkbox"/>	Stormwater
<input type="checkbox"/>	State Permits Branch
<input type="checkbox"/>	Solid Waste

CSN 60-1380

Facility Name Wrightsville Power Plant

Invoice Mailing Address PO Box 188

Fort Lupton, CO 80621

<input checked="" type="checkbox"/>	Initial
<input type="checkbox"/>	Modification
<input type="checkbox"/>	Annual

Permit Number 1842-AOP-R1

Permit Description Title 5 / PSD

Permit Fee Code A

Amount Due \$ 1000

Engineer Bryan Leamons

Paid? ☐No ☐Yes Check # _____

Comments: **Air Permit Fee Calculation**

Title V minimum mod fee = \$1000

Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 6(b), the Air Division of the Arkansas Department of Pollution Control and Ecology gives the following notice:

The KN Power Company ("KN Power") is constructing and will operate a 510 megawatt (MW) combined-cycle natural gas combustion turbine plant located in Pulaski County, 0.5 miles south of Wrightsville, Arkansas (CSN: 60-1380). The facility has applied for modification to the initial Title V permit to adjust results of criteria pollutant emissions evaluations due to altered plant layout. The modification also serves to include non-criteria pollutant rates that were previously permitted as VOC but not quantified separately in the original permit. There will be no actual emission increases allowed by this permitting action.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Suzanne Carswell, Information Officer. Citizens desiring technical information concerning the application or permit should contact Bryan Leamons, Engineer. Both Suzanne Carswell and Bryan Leamons can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Little Rock Public Library, 100 S. Rock, Little Rock, Arkansas 72201. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Suzanne Carswell. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8) and Regulation #26.

Dated this

Richard A. Weiss
Interim Director