United States Environmental Protection Agency Region 8 Air Program 1595 Wynkoop Street Denver, Colorado 80202



Air Pollution Control Permit to Operate 40 CFR Part 71

In accordance with the provisions of Title V of the Clean Air Act and 40 CFR Part 71 and applicable rules and regulations,

Bonanza Power Plant Deseret Power Electric Cooperative

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit.

This source is authorized to operate at the following location:

Uintah & Ouray Indian Reservation in eastern Utah. Latitude: 40° 4.94' N, Longitude: 109° 17.48' W Uintah County, Utah

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by EPA and citizens under the Clean Air Act.

Carl Daly, Director Air Program US EPA Region 8

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Air Pollution Control Permit to Operate 40 CFR Part 71

Bonanza Power Plant Deseret Power Electric Cooperative

Permit Number: V-UO-000004-00.00 Replaces Permit No.: N/A Issue Date: Effective Date: Expiration Date:

The permit number cited above should be referenced in future correspondence regarding this facility.

Table 1. Part 71 Permit Revision History

Date of Action	Permit Number	Type of Action	Description of Action
TBD	V-UO-000004-00.00	Initial Permit	N/A



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Abbreviations and Acronyms

AR	Acid Rain
ARP	Acid Rain Program
BACT	Best Available Control Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAM	Compliance Assurance Monitoring
CD	Calibration Drift
CFR	Code of Federal Regulations
CEMS	Continuous Emission Monitoring System
CGA	Cylinder Gas Audit
CMS	Continuous Monitoring System
	(includes COMS, CEMS, CPMS, and diluent monitors)
CO	Carbon Monoxide
CO_2	Carbon Dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parametric Monitoring System
DAHS	Data Acquisition and Handling System
DSCF	Dry Standard Cubic Foot
DSCM	Dry Standard Cubic Meter
EGU	Electrical Generating Unit
EIP	Economic Incentives Programs
EPA	Environmental Protection Agency
FGD	Flue Gas Desulfurization
gal	Gallon
GPM	Gallons Per Minute
H2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
HF	Hydrogen Fluoride
Hg	Mercury
hr Id. No.	Hour Identification Number
J	Joule
J kg	Kilogram
lb	Pound
LEE	Low Emitting EGU
MACT	Maximum Achievable Control Technology
MVAC	Motor Vehicle Air Conditioner
Mg	Megagram
MMBtu	Million British Thermal Units
mo	Month
NESHAP	National Emission Standards for Hazardous Air Pollutants
ng	Nanogram
NMHC	Non-Methane Hydrocarbons
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review

pН	Negative logarithm of effective hydrogen ion concentration (acidity)
1	
PM	Particulate Matter
PM CEMS	Particulate Matter Continuous Emission Monitoring System
PM_{10}	Particulate Matter less than 10 microns in diameter
ppm	Parts per million
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
psi	Pounds per square inch
psia	Pounds per square inch absolute
QA	Quality Assurance
RAA	Relative Accuracy Audit
RATA	Relative Accuracy Test Audit
RMP	Risk Management Plan
SCFM	Standard Cubic Feet per Minute
SNAP	Significant New Alternatives Program
SO_2	Sulfur Dioxide
tpy	Tons Per Year
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

I. <u>Facility Information and Emission Unit Identification</u>

A. Facility Information

Parent Company Name:	Deseret Power Electric Cooperative				
Parent Company Mailing Address:	10714 South Jordan Gateway, Suite 300 South Jordan, UT 84095				
Plant Name:	Bonanza Power Plan	t			
Plant Mailing Address:		12500 East 25500 South Vernal, UT 84078-8525			
Plant Location:	7.5 miles northwest of 28 miles southeast of				
	Universal Transverse	40° 4.94' N, 109° 17.48' W e Mercator (UTM) coordinates: orthing, 646,206 meters Easting			
Region: 8	State: Utah	County: Uintah			
Reservation: Uintah & Our	ay	Tribe: Ute			
Company Contact: Eric Ols	sen	Phone: 435-781-5706			
Plant Manager/Contact: Ge	ene Grindle	Phone: 435-781-5701			
Responsible Official: Gene	Grindle	Phone: 435-781-5701			
Tribal Contact: Gordon Ho	well, Chairman	Phone: 435-722-5161			
Local Government Contact:	N/A	Phone: N/A			
SIC Code: 4911	SIC Code: 4911				
AFS Plant Identification Number: 49-047-00001					
Other Clean Air Act Permits:					
Federal acid rain permit: December 29, 1997 (expired on December 31, 2002)					
Federal PSD permits: February 4, 1981; updated and re-issued February 2, 200					

Description of Process: See Attachment 1.

Potential to Emit: Virtually all of this plant's emissions come from the main boiler. The potential-to-emit for the overall plant, in tons per year, as listed on Form "PTE" of the updated Part 71 operating permit application submitted on April 3, 2012 and amended on March 13, 2013, is as follows:

These emission estimates are based on use of coal as fuel during normal operation, with some fuel oil used during boiler startups, and based on an estimate by Deseret Power that approximately 99.5% of the coal is burned while the pollution control equipment is in service.

B. Facility Emission Points

Below is a listing of specific emission units and activities at Deseret Bonanza power plant. Applicable requirements for the main boiler stack in Table 1 are listed in section II.A of this permit. Applicable requirements for certain insignificant activities/emitting units in Table 2 are listed in section II.B. of this permit. Insignificant activities/emitting units in Table 2 that have no applicable requirements are indicated with an asterisk.

Emiss ion Unit	Description	Control Equipment
1-1	BOILER: Foster-Wheeler steam generator;	low-NOx burners;
	heat input capacity of 4,578 MMBtu/hr;	baghouse (10,800 bags);
	dry bottom wall-fired on bituminous coal;	wet limestone FGD scrubber
	uses diesel or natural gas during startup,	(3 modules)
	shutdown, upsets and flame stabilization.	
	Constructed in 1984.	
	Exhausts through main plant stack.	

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I anie Z	Non-insi	onificant	Emission	I nits
	T TOH HIST	Similant	Limbolon	Omus

Activity/ Emission Unit ID	Description	Applicable Permit Condition
1-2	AUXILIARY BOILER * (184 MMBtu/hr, pre-1984, fired on fuel oil or natural gas)	none
1-3	EMERGENCY DIESEL GENERATOR (750 KW, 1,220 HP, fired on fuel oil, started up in 2013)	II.A.4.(b)
1-4	EMERGENCY DIESEL FIRE PUMP (2.83 MMBtu/hr, 498 HP, fired on fuel oil, started up in mid-1980's)	II.A.4.(a)
1-5	CONSTRUCTION HEATERS * (12.81 MMBtu/hr each, fired on propane)	none
DC-1	COAL TERMINAL BUILDING (coal distribution facility connecting conveyors 1, 2 & 8; equipped with fabric filter dust collector)	II.B.1.(a), II.B.2
DC-2	COAL SILO (silo for storing and handling coal; equipped with fabric filter dust collector)	II.B.1.(a), II.B.2
DC-3	COAL SILO RECLAIM/TRANSFER (coal handling area; equipped with fabric filter dust collector)	II.B.1.(a), II.B.2
DC-4	COAL CRUSHING BUILDING (receives coal from silo and reclaim; equipped with fabric filter dust collector)	II.B.1.(a), II.B.2
DC-5	COAL BUNKERS (coal storage bunkers that feed pulverizers; equipped with fabric filter dust collector)	II.B.1.(a), II.B.2
LDC-1	LIMESTONE RECEIVING HOPPER (hopper to transfer limestone to the limestone conveyor; equipped with fabric filter dust collector)	II.B.1.(a)

 Table 3. Insignificant Activities/Emitting Units

Activity/ Emission Unit ID	Description	Applicable Permit Condition
LDC-2	LIMESTONE STORAGE BUNKERS (limestone storage bunkers for feeding scrubber; equipped with fabric filter dust collector)	II.B.1.(a)
none	FLY ASH SILO * (stores fly ash prior to loading on landfill conveyor; equipped with fabric filter dust collector)	none
none	COAL TRACK HOPPER FOR BOTTOM-DUMP COAL (below-track coal car unloading hopper; equipped with water sprays)	II.B.1.(b), II.B.2
none	COAL PILE (coal storage pile, maximum 22 acres, consisting of a long-term storage area and active/reclaim area (maximum 11 acres); surfactant sealant used as needed for dust control at long-term storage area)	II.B.1.(c), II.B.1.(f)
none	COAL CONVEYORS 1, 2 & 8 (all covered; conveyors 1 and 8 equipped with water sprays)	II.B.1.(a), II.B.2
none	COAL CONVEYORS 3a, 3b, 4a & 4b (covered; coal transfer from storage to plant)	II.B.1.(a), II.B.2
none	LIMESTONE LONG-TERM STORAGE PILE (surfactant sealant used as needed for dust control)	II.B.1.(d), II.B.1.(f)
none	LIMESTONE CONVEYOR (covered; transfers limestone from storage area to scrubber)	II.B.1.(a)
none	ASH/SLUDGE LANDFILL CONVEYOR * (covered conveyor from sludge building to landfill; includes "grasshopper" conveyor system, consisting of four uncovered conveyors, at end of regular sludge conveyor system)	none

Activity/ Emission Unit ID	Description	Applicable Permit Condition
none	ASH/SLUDGE LANDFILL DISCHARGE AREA (active discharge area for ash and sludge; includes water sprays as necessary for dust control)	II.B.1.(e)
none	ASH/SLUDGE LANDFILL * (stabilized and inactive)	None
none	ACCESS/HAUL ROADS (partially paved road from boiler building to landfill and road from SFC discharge to bottom ash landfill; water sprays or chemical treatment as necessary for dust control)	II.B.1.(g), II.B.1.(h)
none	PERIMETER ROAD (unpaved road around the perimeter fence; water sprays or chemical treatment as necessary for dust control)	II.B.1.(g), II.B.1.(h)
Tank #1, west	#2 DIESEL FUEL OIL STORAGE TANK #1 * (288,000 gallon capacity)	none
Tank #2, east	#2 DIESEL FUEL OIL STORAGE TANK #2 * (288,000 gallon capacity)	none
none	ABOVE-GROUND GASOLINE STORAGE TANK* (10,000 gallon capacity)	none
none	ABOVE-GROUND DIESEL STORAGE TANK * (20,000 gallon capacity)	none
none	VEHICLE REFUELING EQUIPMENT FOR DIESEL AND GASOLINE *	none
none	TRUCK-MOUNTED VACUUM SYSTEM ("GUZZLER") * (mobile truck mounted vacuum equipped with particulate filter to clean up spilled material such as ash)	none

Activity/ Emission Unit ID	Description	Applicable Permit Condition
none	MISCELLANEOUS ABRASIVE BLASTING * (abrasive blasting of parts and equipment inside the boiler baghouse)	none
none	WATER TREATMENT AND ASSOCIATED CHEMICAL STORAGE * (areas for equipment and chemicals to treat water used on site)	None
none	BOTTOM ASH LANDFILL *	None

* no applicable requirements.

II. <u>Requirements for Specific Units</u>

A. Main Boiler (Unit 1-1) and Emergency Engines

Requirements in sections II.A.1 and II.A.2 of this permit (New Source Performance Standards) are taken from 40 CFR Part 60. Notwithstanding conditions in this permit, the permittee shall comply with all applicable requirements of 40 CFR Part 60.

The term "affected facility," as used in sections II.A.1 and II.A.2 of this permit, is as defined in 40 CFR 60.40Da(a). The term "Administrator" means the Administrator of the EPA. Certain authorities of the Administrator under 40 CFR Part 60 may be delegated to EPA Regional offices.

Requirements in section II.A.3 of this permit (40 CFR Part 63, Subpart UUUUU) and section II.A.4 of this permit (40 CFR Part 63, Subpart ZZZZ) are taken from the CFR.

- 1. <u>Standards of Performance for New Stationary Sources General Provisions</u> [40 CFR Part 60, Subpart A]
 - (a) <u>Notification and recordkeeping</u>. [40 CFR 60.7]
 - (i) The permittee shall provide written notification, or, if acceptable to both the permittee and the Administrator, electronic notification, for the following:
 - (A) $\underline{\$60.7(a)(1)}$: A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date.
 - (B) $\underline{\$60.7(a)(3)}$: A notification of the actual date of initial startup of an affected facility, postmarked within 15 days after such date.
 - (C) <u>\$60.7(a)(4)</u>: A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
 - (D) <u>§60.7(a)(5)</u>: A notification of the date upon which demonstration of the continuous monitoring system performance commences, in accordance with §60.13(c). Notification shall be postmarked not less than 30 days

prior to such date.

- (E) $\frac{60.7(a)(6)}{2}$: A notification of the anticipated date for conducting the opacity observations required by 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
- (F) $\frac{60.7(a)(7)}{2}$: A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 60.8, in lieu of Method 9 observation data as allowed by 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

[40 CFR 60.7(a)]

(ii) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

- (iii) For each continuous monitoring device required to be installed, the permittee shall submit excess emissions and monitoring systems performance reports (excess emissions are defined in the applicable Subpart Da), and/or summary report forms (see 40 CFR 60.7(d)), semiannually to the EPA Region 8 office (except for opacity, for which quarterly excess emission reporting is required by §60.51Da(i)), or unless the Administrator determines, on a case-by-case basis, that more frequent reporting is necessary to accurately assess compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:
 - (A) <u>§60.7(c)(1)</u>: The magnitude of excess emissions, computed in accordance with §60.13(h), any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.
 - (B) $\frac{60.7(c)(2)}{2}$: Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions

of the affected facility, the nature and cause of any malfunction (if known); and the corrective action taken or preventative measures adopted.

- (C) $\underline{\$60.7(c)(3)}$: The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.
- (D) $\underline{\$60.7(c)(4)}$: When no excess emissions have occurred, or the continuous monitoring system(s) have not been inoperative, repaired or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

 (iv) The summary report form shall contain the information and be in the format shown in Figure 1 of §60.7(d), unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the Administrator.

If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in §60.7(c) shall both be submitted.

[40 CFR 60.7(d)]

[Explanatory note: Additional reporting requirements for CEMS and COMS are in conditions II.A.2.(g)(ii) and (viii) of this permit, pertaining to 40 CFR 60.51Da(b) and (h), respectively.]

 (v) Notwithstanding the frequency of reporting requirements specified in §60.7(c), the permittee may reduce the quarterly excess emission and monitoring system reporting frequency for opacity of §60.51Da(i) to semi-annual, if the following conditions are met:

- (A) For one full year (e.g., 4 quarterly or 12 monthly reporting periods), the affected facility's excess emissions and monitoring systems reports to comply with a standard under 40 CFR Part 60 continually demonstrate that the facility is in compliance with the applicable standard;
- (B) The permittee continues to comply with all recordkeeping and monitoring requirements of Subparts A and Da of 40 CFR Part 60; and
- (C) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided for in (0.7)(e)(2).

[40 CFR 60.7(e)(1)]

(vi) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the permittee notifies the Administrator in writing of the permittee's intention to make such a change and the Administrator does not object to the intended change.

In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of the permittee's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for non-compliance in the future.

If the Administrator disapproves the permittee's request to reduce the frequency of reporting, the Administrator will notify the permittee in writing within 45 days after receiving notice of the permittee's intention. The notification from the Administrator to the permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

[40 CFR 60.7(e)(2)]

(vii) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in Subpart Da of 40 CFR Part 60, the frequency of reporting shall revert to the frequency specified in Subpart Da, and the permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non-complying event. After demonstrating compliance with the applicable standard in Subpart Da for another full year, the permittee may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in 60.7(e)(1) and (2). [40 CFR 60.7(e)(3)]

(viii) The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60, recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

For automated CEMS with calculated data averages that do not exclude periods of CEMS breakdown or malfunction, the permittee shall, in lieu of maintaining the file of all CEMS subhourly measurements as required by §60.7(f), retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hardcopy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system.

[40 CFR 60.7(f)]

(b) <u>Performance tests</u>. [40 CFR 60.8]

(i) <u>Deadlines</u>. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such times as may be required by the Administrator under section 114 of the Clean Air Act, the permittee shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a)]

- (ii) <u>Test methods</u>. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the applicable subpart, unless the Administrator:
 - (A) Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology,

- (B) Approves the use of an equivalent method,
- (C) Approves the use of an alternative method, the results of which he has determined to be adequate for indicating whether the source is in compliance,
- (D) Waives the requirement for performance tests because the permittee has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or
- (*E*) Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.
- (F) Nothing in §60.8(b) shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Clean Air Act.

[40 CFR 60.8(b)]

(iii) <u>Test conditions</u>. Performance tests shall be conducted under such conditions as the Administrator shall specify to the permittee based on representative performance of the affected facility. The permittee shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test under 40 CFR Part 60, nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard (Subpart Da).

[40 CFR 60.8(c)]

(iv) <u>Test notification</u>. The permittee shall notify the Administrator at least 30 days prior to any performance test, except as specified under other subparts of 40 CFR Part 60, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the permittee shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

[40 CFR 60.8(d)]

- (v) <u>Test sampling access</u>. The permittee shall provide, or cause to be provided, performance testing facilities as follows:
 - (A) Sampling ports adequate for test methods applicable to the facility. This includes: (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures, and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - (*B*) Safe sampling platform(s),
 - (C) Safe access to sampling platform(s),
 - (D) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

(vi) <u>Test runs</u>. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with the applicable standard, the arithmetic mean of results of the three runs shall apply.

In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the permittee's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR 60.8(f)]

[Explanatory note: The requirement in §60.8(f) for three test runs is applicable only for particulate testing at Bonanza plant. Performance tests for SO_2 and NO_x must be conducted as specified in 40 CFR 60.50Da.]

- (c) <u>Compliance with standards and maintenance requirements</u>. [40 CFR 60.11]
 - (i) <u>General</u>. Compliance with standards in 40 CFR Part 60, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard.

[40 CFR 60.11(a)]

(ii) <u>Method 9</u>. Compliance with opacity standards in 40 CFR Part 60 shall be determined by conducting observations in accordance with Method 9 in Appendix A of 40 CFR Part 60, any alternative method that is approved by the Administrator, or as provided in §60.11(e)(5). For purposes of determining initial compliance, the minimum time of observations shall be 3 hours (30 six-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

[40 CFR 60.11(b)]

(iii) <u>Startup/shutdown/malfunction</u>. The opacity standards set forth in 40 CFR Part 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

[40 CFR 60.11(c)]

(iv) <u>Operation and maintenance</u>. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

(v) <u>Opacity observations</u>. The permittee shall comply with all applicable requirements of §60.11(e) regarding opacity observations, including demonstration of initial compliance, use of COMS, proof of current visible observer emission certification, and reporting and submitting opacity data to the Administrator.

[40 CFR 60.11(e)]

(vi) <u>Supersession</u>. Special provisions set forth under any applicable subpart of 40 CFR Part 60 shall supersede any conflicting provisions in §60.11(a) through (e).

[40 CFR 60.11(f)]

(vii) <u>Credible evidence</u>. For the purpose of submitting compliance certifications or establishing whether or not a person has violated, or is in violation of, any standard in 40 CFR Part 60, nothing in 40 CFR Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether the source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)]

(viii) <u>Circumvention</u>. The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard in 40 CFR Part 60. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

(d) <u>Monitoring requirements</u>. [40 CFR 60.13]

(i) <u>Performance specifications/quality assurance</u>. The permittee shall comply with applicable performance specifications for continuous monitoring systems under Appendix B of 40 CFR Part 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR Part 60, unless otherwise specified in an applicable subpart or by the Administrator.

[40 CFR 60.13(a)]

- (ii) <u>Deadlines</u>. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. [40 CFR 60.13(b)]
- (iii) <u>Continuous opacity monitoring</u>. If the permittee elects to submit COMS data for compliance with the opacity standard as provided for under §60.11(e)(5), the permittee shall conduct a performance evaluation of the COMS as specified in Performance Specification 1 in Appendix B of 40 CFR Part 60, before the performance test required under §60.8 is conducted. Otherwise, the permittee shall conduct a performance test under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR Part 60. The permittee shall conduct COMS or CEMS performance tests at such other times as may be required by the Administrator under section 114 of the Clean Air Act.

The permittee shall submit reports to the Administrator on the results of COMS and CEMS performance evaluations by the applicable deadline(s) specified in (0,1)(1) and (2).

[40 CFR 60.13(c)]

(iv) Span, calibration drift and CMS adjustments. The permittee shall check the zero and span calibration drifts of CEMS at least once daily and make necessary adjustments, according to the procedures specified at §60.13(d)(1). For COMS, the permittee shall comply with procedures specified at §60.13(d)(1) and (2) for system checks and adjustments, and for producing a simulated zero opacity condition and an upscale opacity condition.

[40 CFR 60.13(d)]

- (v) <u>Continuous operation and frequency of monitoring</u>. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
 - (A) <u>COMS</u> one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
 - (*B*) <u>CEMS</u> one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)]

[Explanatory note: Related provision §60.49Da(e), referenced by condition II.A.2.(e)(v) of this permit, requires the CEMS to operate during all periods of operation of the affected facility, including periods of startup, shutdown and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. §60.13(e) and §60.49Da(e), taken together, require the CEMS to operate continuously at all times required by §60.49Da(e).]

- (vi) <u>Combined or split effluents</u>. The permittee shall comply with monitoring requirements of §60.13(g) applicable to:
 - (A) a single affected facility where more than one continuous monitoring system is used to measure the emissions, or where the effluent from one affected facility is released to the atmosphere through more than one point (split effluent),

- (*B*) effluents from two or more affected facilities, subject to opacity standards, that are combined before being released to the atmosphere (combined effluent for opacity), and
- (C) effluent from two or more affected facilities, subject to the same emissions standard other than opacity, that are combined before being released to the atmosphere (combined effluent for other than opacity).

[40 CFR 60.13(g)]

(vii) <u>Data reduction</u>. The permittee shall reduce all COMS data to 6-minute averages and all CEMS data to 1-hour averages for time periods as defined in §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For CEMS, 1-hour averages shall be computed from at least four valid data points, i.e., one data point in each of the 15-minute quadrants of the hour. For a partial operating hour, at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average. For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.

The permittee shall comply with applicable provisions in §60.13(h)(2)(ii) and (iii), on calculating hourly averages for hours where required CMS maintenance, quality assurance, or calibration error checks are conducted.

Data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under §60.13(h), except that for permittees complying with the requirements of §60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction.

An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

All excess emissions shall be converted into units of the standard using applicable conversion procedures of Subpart Da of 40 CFR Part 60. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in Subpart Da to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

(viii) <u>Alternative monitoring</u>. After receipt and consideration of written application from the permittee, the Administrator may approve alternatives to any monitoring procedures or requirements of 40 CFR Part 60, including, but not limited to, those listed at §60.13(i)(1) through (9).

[40 CFR 60.13(i)]

(ix) <u>Alternative relative accuracy test</u>. The permittee may request, from the Administrator, an alternative to the relative accuracy test specified in Performance Specification 2 of Appendix B of 40 CFR Part 60, as allowed under §60.13(j)(1) and (2).

[40 CFR 60.13(j)]

- <u>Standards of Performance for Electric Utility Steam Generating Units for Which</u> <u>Construction, Modification or Reconstruction Commenced After September 18, 1978</u>. [40 CFR Part 60, Subpart Da]
 - (a) <u>Particulate Matter Emission Limitations</u>. [40 CFR 60.42Da]
 - (i) Particulate matter emissions from the main boiler stack shall not exceed 0.030 lb/MMBtu of heat input.

[40 CFR 60.42Da(a)]

(ii) Visible emissions from the main boiler stack shall not exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. If the permittee elects to install, calibrate, maintain and operate a PM CEMS according to the requirements of this subpart, the permittee is exempt from the opacity standard.

[40 CFR 60.42Da(b)]

- (b) <u>Sulfur dioxide emission limitations</u>. [40 CFR 60.43Da]
 - (i) SO₂ emissions from the main boiler stack shall not exceed, on a 30-day rolling average basis:
 - (A) 1.20 lb/MMBtu of heat input and 10 percent of the potential combustion concentration (90 percent reduction);
 - (*B*) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/MMBtu of heat input;
 - (C) 180 ng/J (1.4 lb/MWh) gross energy output; or

(D) 65 ng/J (0.15 lb/MMBtu) heat input.

[40 CFR 60.43Da(a) and (g)]

(ii) If fuels other than subbituminous or bituminous coal are combusted, the permittee shall comply with the applicable SO₂ emission limitations, percent reduction requirements and averaging periods in §60.43Da(b) through (d). If different fuels are combusted simultaneously, the applicable SO₂ emission limitation and percent reduction requirement shall be determined by proration, using the formulas in §60.43Da(h).
 [40 CFR 60.43Da(b), (c), (d) and (h)]

(c) <u>Nitrogen oxides emission limitations</u>. [40 CFR 60.44Da]

(i) NO_x emissions from the main boiler stack shall not exceed 0.50 lb/MMBtu of heat input when subbituminous coal is fired, or 0.60 lb/MMBtu of heat input when bituminous coal is fired, based on a 30-day rolling average.

If fuels other than subbituminous or bituminous coal are combusted, the permittee shall comply with the applicable NO_x emission limitations for other fuels in the table in §60.44Da(a)(1).

(ii) When subbituminous and bituminous coals are fired simultaneously, the applicable NO_x emission standard shall be determined by proration using the formula at §60.44Da(a)(2).

[40 CFR 60.44Da(a)]

- (d) <u>Compliance provisions</u>. [40 CFR 60.48Da]
 - (i) The applicable PM emissions limit and opacity standard under §60.42Da, SO₂ emissions limit under §60.43Da, and NO_x emissions limit under §60.44Da, apply at all times except during periods of startup, shutdown, or malfunction.

[40 CFR 60.48Da(a)]

(ii) After the initial performance test required under 60.8, compliance with the applicable SO₂ emissions limit and percent reduction requirements under 60.43Da, and the applicable NO_x emissions limit under 60.44Da, is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30-boiler operating day rolling average emission rate for both SO₂ and NO_x and a new percent reduction for SO₂ are calculated to demonstrate compliance with the standards.

[40 CFR 60.48Da(b)]

(iii) Compliance with applicable 30-boiler operating day rolling average SO_2 and NO_x emission limits is determined by calculating the arithmetic average of all hourly emission rates for SO_2 and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown and malfunction.

[40 CFR 60.48Da(d)]

(iv) Compliance with the applicable percentage reduction requirement for SO₂ is determined based on the average inlet and average outlet SO₂ emission rates for the 30 successive boiler operating days.

[40 CFR 60.48Da(e)]

(v) If the permittee has not obtained the minimum quantity of emissions data as required under §60.49Da, compliance of the affected facility with the emission requirements under §60.43Da and §60.44Da, for the day on which the 30-day period ends, may be determined by the Administrator by following the applicable procedures in section 7 of Method 19 of Appendix A of 40 CFR Part 60.

[40 CFR 60.48Da(h)]

(vi) In response to an action to enforce the standards in §60.42Da, §60.43Da, and §60.44Da, the permittee may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined in §60.2. The affirmative defense shall not be available for claims for injunctive relief. Specific provisions on affirmative defense are in §60.48Da(s).

[40 CFR 60.48Da(s)]

(vii) Compliance with the PSD BACT emission limit for particulate matter of 0.0297 lb/MMBtu (listed in condition II.A.6.(a)(i) of this permit), using the particulate matter test methods and procedures required under §60.50Da(b), constitutes compliance with the particulate matter emission limit under §60.42Da(a) of 0.030 lb/MMBtu.

[40 CFR 71.6(a)(3)(i)(A)]

(viii) Compliance with the PSD BACT emission limit for SO₂ of 0.15 lb/MMBtu, on a 30-day rolling average (listed in condition II.A.6.(b) of this permit), using the SO₂ test methods, procedures and CEMS data required by Subpart Da of 40 CFR Part 60, constitutes compliance with the SO₂ emission limit under §60.43Da(a) of 1.20 lb/MMBtu (or 0.60 lb/MMBtu, where applicable).

[40 CFR 71.6(a)(3)(i)(A)]

(ix) Compliance with the PSD BACT emission limit for NO_x of 0.55 lb/MMBtu on a 30-day rolling average when bituminous coal is fired (listed in condition II.A.6.(c) of this permit), using the NO_x test methods, procedures and CEMS data required by Subpart Da of 40 CFR Part 60, constitutes compliance with the NO_x emission limit under §60.44Da(a) of 0.60 lb/MMBtu applicable to firing of bituminous coal.

[40 CFR 71.6(a)(3)(i)(A)]

(e) <u>Emission monitoring.</u> [40 CFR 60.49Da]

(i) The permittee shall install, calibrate, maintain and operate a COMS, and record the output of the system, for measuring opacity of emissions discharged to the atmosphere from the main boiler stack. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the SO₂ control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator).

[40 CFR 60.49Da(a)(1)]

[Explanatory note: Due to water droplet interference in the stack, the COMS at Bonanza plant is located upstream of the FGD scrubber. There is a COMS at each of two ducts. The readings from the two COMS are averaged together and the average is used for generating quarterly excess emission reports to EPA for opacity.]

(ii)

The permittee shall install, calibrate, maintain and operate a CEMS, and record the output of the system, for measuring SO_2 emissions from the main boiler stack. For determining percent reduction, SO_2 emissions shall be measured at both the inlet and outlet of the SO_2 control device. An "as-fired" fuel monitoring system (upstream of the coal pulverizers), meeting the requirements of Method 19 of Appendix A of 40 CFR Part 60, may be used in lieu of an inlet SO_2 CEMS, to determine potential sulfur dioxide emissions.

If the permittee has installed and certified a SO_2 CEMS according to the requirements of 40 CFR 75.20(c)(1) and Appendix A to 40 CFR Part 75, and is continued to meet the ongoing quality assurance requirements of §75.21 and Appendix B to Part 75, that CEM may be used to meet the requirements of §60.49Da(b), provided that the provisions of §60.49Da(b)(4)(i) through (iii) are met.

[40 CFR 60.49Da(b)]

(iii) The permittee shall install, calibrate, maintain and operate a CEMS, and record the output of the system, for measuring NO_x emissions discharged to the atmosphere from the main boiler stack.

If permittee has installed a NO_x emission rate CEMS to meet the requirements of 40 CFR Part 75, and is continuing to meet the ongoing requirements of Part 75, that CEMS may be used to meet the requirements of 60.49Da(c), except that the permittee shall also meet the requirements of 60.51Da. Data reported to meet the requirements of 60.51Da shall not include data substituted using the missing data procedures in Subpart D of 40 CFR Part 75, nor shall the data have been bias adjusted according to the procedures of Part 75.

[40 CFR 60.49Da(c)]

(iv) The permittee shall install, calibrate, maintain and operate a CEMS, and record the output of the system, for measuring oxygen or carbon dioxide content (diluent) of the flue gases, at each location where SO_2 or NO_x emissions are monitored.

If permittee has installed and certified a CO_2 or O_2 monitoring system according to 40 CFR 75.20(c) and Appendix A to 40 CFR Part 75, and the monitoring system continues to meet the applicable quality assurance provisions of §75.21 and Appendix B to Part 75, that CEMS may be used together with the Part 75 SO₂ concentration monitoring system described in §60.49Da(b), to determine the SO₂ emission rate in lb/MMBtu. SO₂ data used to meet the requirements of §60.51Da shall not include substitute data values derived from the missing data procedures in Subpart D of Part 75, nor shall the data have been bias adjusted according to procedures of Part 75.

[40 CFR 60.49Da(d)]

The CEMSs for SO_2 , NO_x and diluent shall be operated and data shall be recorded during all periods of operation of the affected facility, including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. [40 CFR 60.49Da(e)]

[Explanatory note: Related provision 60.13(e), referenced by condition II.A.1.(e)(v) of this permit, requires the CEMS to operate continuously. 60.13(e) and 60.49Da(e), taken together, require the CEMS to operate continuously at all times required by 60.49Da(e).]

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 (\mathbf{v})

(vi) Emission data shall be obtained for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with the CEMS, the permittee shall supplement emission data with other monitoring systems approved by the Administrator, or by the reference methods and procedures of §60.49Da(h).

[40 CFR 60.49Da(f)]

(vii) The 1-hour averages required under §60.13(h) are expressed in ng/J (lb/MMBtu) heat input and used to calculate the average emission rates under §60.48Da. The 1-hour averages are calculated using the data points required under §60.13(h)(2).

[40 CFR 60.49Da(g)]

- (viii) When it becomes necessary to supplement CEMS data to meet minimum data requirements of §60.49Da(f), the permittee shall use the following methods and procedures (or acceptable alternative methods as allowed by §60.49Da(j)).
 - (A) Method 6 of Appendix A of 40 CFR Part 60 shall be used to determine SO₂ concentration, at the same location as the SO₂ monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.
 - (B) Method 7 of Appendix A of 40 CFR Part 60 shall be used to determine NO_x concentration, at the same location as the NO_x monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
 - (C) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B of Appendix A of 40 CFR Part 60 shall be used to determine the O_2 or CO_2 (diluent) concentration, at the same location as the O_2 or CO_2 monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
 - (D) The procedures in Method 19 of Appendix A of 40 CFR Part 60 shall be used to compute each one-hour average concentration in ng/J (lb/MMBtu) heat input.

[40 CFR 60.49Da(h)]

(ix) The permittee shall use the methods and procedures specified in §60.49Da(i) to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d). Acceptable alternative methods and procedures are given in §60.49Da(j). Span values shall be as specified in §60.49Da(i), for affected facilities burning only fossil fuel:

(A)	<u>COMS</u> :	between 60% and 80% opacity
(B)	<u>NO_x CEMS</u> :	1,000 ppm (solid fossil fuel only)
(<i>C</i>)	Inlet SO ₂ CEMS:	125% of maximum estimated hourly potential emissions of the fuel fired
(D)	Outlet SO ₂ CEMS:	50% of maximum estimated hourly potential emissions of the fuel fired

[40 CFR 60.49Da(i)]

[Explanatory note: Related provision for COMS at 40 CFR Part 60, Appendix B, Performance Specification 1 (PS1), section 3.5, requires "full scale" of greater than 80% opacity, rather than the 60-80% "span value" specified by §60.49Da(i)(3). To the extent that the regulations conflict, PS1 shall supersede §60.49Da(i)(3).]

[Explanatory note: Related provision for NO_x CEMS at 40 CFR Part 75, Appendix A, section 2.1.2.1, option (4), allows use of historical CEM data for calculating the "maximum potential concentration" (MPC). Section 2.1.2.3 of Appendix A requires the MPC to be used to calculate the "high span value" for NO_x CEMS. The permittee has used this provision to calculate 500 ppm as span value; however, §60.49Da(i)(3) requires 1000 ppm as span value. As provided by §60.49Da(c), if the requirements of Appendix A of 40 CFR Part 75 are satisfied for the NO_x CEMS, then the requirements of §60.49Da(i)(3) are also satisfied for the NO_x CEMS.]

(x) The permittee may use the following as alternatives to the reference methods and procedures specified under §60.49Da(h):

(A) For Method 6: Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under §60.49Da(i), the conditions under §60.48Da(d)(1) apply; these conditions do not apply under §60.49Da(h).

- (*B*) For Method 7: Methods 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D or 7E is used, the sampling time for each run shall be 1 hour.
- (C) For Method 3: Methods 3A or 3B may be used if the sampling time is 1 hour.
- (D) For Method 3B: Method 3A may be used.

[40 CFR 60.49Da(j)]

(xi) The permittee shall prepare and submit to the Administrator for approval a unit-specific monitoring plan for each monitoring system, at least 45 days before commencing certification of the monitoring systems. The permittee shall comply with the requirements in the plan. The plan must address the requirements in §60.49Da(s)(1) through (6).

[40 CFR 60.49Da(s)]

(xii) If the permittee uses a SO₂, NO_x, CO₂, and O₂ CEMS to meet the requirements of subpart Da of 40 CFR Part 60, the permittee shall install, certify, operate and maintain the CEMS as specified in §60.49Da(w)(1) through (5).

[40 CFR 60.49Da(w)]

- (f) <u>Compliance determination procedures and methods</u>. [40 CFR 60.50Da]
 - (i) In conducting the performance tests required in §60.8, the permittee shall use, as reference methods and procedures, the methods in Appendix A of 40 CFR Part 60, or the methods and procedures as specified in §60.50Da, except as provided in §60.8(b). §60.8(f) does not apply to §60.50Da for SO₂ and NO_x. Acceptable alternative methods are given in §60.50Da(e). [40 CFR 60.50Da(a)]
 - (ii) In conducting the performance tests to determine compliance with the PM emission limits in §60.42Da, the permittee shall meet the following requirements in §60.50Da(b)(1) and (3):
 - (A) The dry basis F factor (O_2) procedures in Method 19 shall be used to compute the emission rate of PM.
 - (*B*) For PM concentration, Method 5B shall be used for wet FGD systems.
 - (1) The sampling time and sample volume for each run shall be at least 120 minutes and 60 dry standard cubic feet. The

probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 degrees C (320 ± 25 degrees F).

- (2) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.
- (C) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[40 CFR 60.50Da(b)]

- (iii) The permittee shall determine compliance with the SO₂ standards of §60.43Da (emission rate and percent reduction) in accordance with the provisions of §60.50Da(c).as follows:
 - (A) The procedures of Method 19 shall be used to determine the percent SO_2 reduction of any SO_2 control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used, if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as fired" fuel analysis for 30 successive boiler operating days.
 - (B) The formula in (60.50Da(c)(1)) shall be used to calculate percent of potential SO₂ emissions to the atmosphere.
 - (C) The CEMS in §60.49Da(b) and (d) shall be used to determine concentrations of SO₂ and diluent (CO₂ or O₂).
 [40 CFR 60.50Da(c)]
- (iv) The permittee shall determine compliance with the NO_x standards of 60.44Da by the procedures of Method 19 (for emission rate). The continuous monitoring systems required by 60.49Da(c) and (d) shall be used to determine concentrations of NO_x and diluent (CO₂ or O₂).

- (v) The permittee may use the following as alternatives to the reference methods and procedures specified in §60.50Da:
 - (A) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems, if the stack temperature at the sampling location does not exceed an average temperature of 160 degrees C (320 degrees F). The procedures of sections 8.1 and 11.1 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.
 - (B) The F_c factor (CO₂) procedures in Method 19 may be used to compute the emission rate of PM under the stipulations of 60.46(d)(1). The CO₂ shall be determined in the same manner as the O₂ concentration.

[40 CFR 60.50Da(e)]

- (g) <u>Reporting requirements</u>. [40 CFR 60.51Da]
 - (i) <u>Performance and monitor evaluation tests</u>. The permittee shall report to the Administrator the performance test data from the initial and subsequent performance tests and from the performance evaluation of the continuous monitors (including the transmissometer).

[40 CFR 60.51Da(a)]

- (ii) <u>CEMS compliance reports</u>. For SO_2 and NO_x , the following information is reported to the Administrator for each 24-hour period:
 - (A) Calendar date.
 - (B) Average SO_2 and NO_x emission rates (in ng/J or lb/MMBtu) and percent reduction of the potential combustion concentration of SO_2 , for each 30 successive boiler operating days, ending with the last 30-day period in the quarter.
 - (C) Reasons for any noncompliance with emission or percent reduction standards and description of corrective actions taken.
 - (D) Identification of boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not

obtaining sufficient data; and description of corrective actions taken.

- (*E*) Identification of the times when emission data have been excluded from the calculation of the average emission rates because of startup, shutdown or malfunction.
- (*F*) Identification of the F factor used for calculations, method of determination, and type of fuel combusted.
- (G) Identification of times when hourly averages have been obtained based on manual sampling methods.
- (*H*) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
- (I) Description of any CEMS modifications which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.

[40 CFR 60.51Da(b)]

(iii) <u>Missing data reports</u>. If the minimum quantity of emissions data as required by §60.49Da is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of §60.48Da(h) shall be reported to the Administrator for that 30-day period:

- (A) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable.
- (B) The standard deviation of hourly averages for outlet emission rates (s_0) and inlet emission rates (s_i) , as applicable.
- (C) The lower confidence limit for the mean outlet emission rate (E_0^*) and the upper confidence limit for the mean inlet emission rate (E_i^*) , as applicable.
- (D) The applicable potential combustion concentration.
- (*E*) The ratio of the upper confidence limit for the mean outlet emission rate (E_0^*) and the allowable emission rate (E_{std}) , as applicable.

[40 CFR 60.51Da(c)]

(iv) <u>Fuel pretreatment credit reports</u>. If fuel pretreatment credit toward the SO_2 emission standard of §60.43Da is claimed, the permittee shall submit a signed statement that includes the information in §60.51Da(e)(1) and (2).

[40 CFR 60.51Da(e)]

(v) Reports of control system changes during periods of monitor unavailability. For any periods for which opacity, SO_2 or NO_x emissions data are not available, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of data unavailability.

[40 CFR 60.51Da(f)]

- (vi) <u>General compliance statement</u>. The permittee shall submit a signed statement indicating whether:
 - (A) The required CEMS calibration, span and drift checks or other periodic audits have or have not been performed as specified.
 - (B) The data used to show compliance were or were not obtained in accordance with approved methods and procedures of 40 CFR Part 60 and are representative of plant performance.
 - (C) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
 - (D) Compliance with the standards has or has not been achieved during the reporting period.

[40 CFR 60.51Da(h)]

(vii) <u>Opacity reporting</u>. For purposes of the reports required under §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standard in §60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses shall be submitted to the Administrator each calendar quarter.

[40 CFR 60.51Da(i)]

[*Explanatory note: See related condition II.A.1.(a)(v) of this permit, pertaining to 40 CFR §60.7(e), for reduced reporting frequency.*]

(viii) <u>Semiannual reporting frequency</u>. The permittee shall submit the written reports required under §60.51Da, and under Subpart A of 40 CFR Part 60, to the Administrator semiannually. The reports shall be postmarked by the 30th day following the end of each six-month period.

[40 CFR 60.51Da(j)]

(ix) Electronic reporting. The permittee may submit electronic quarterly reports, for SO_2 and/or NO_x and/or opacity, in lieu of submitting the written reports required by 60.51Da(b) and (i). The format of each electronic quarterly report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of Subpart Da of 40 CFR Part 60 was achieved during the reporting period.

[40 CFR 60.51Da(k)]

- 3. <u>National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired</u> <u>Electric Utility Steam Generating Units</u>. [40 CFR Part 63, Subpart [UUUUU]
 - (a) <u>General Compliance Requirements</u>. [40 CFR 63.10000 through 63.10001]

Effective April 16, 2015, the permittee shall comply with the following requirements for each affected emission unit:

(i) The permittee must meet the notification requirements in §63.10030 according to the schedule in §63.10030 and in Subpart A of Part 63. Some of the notifications must be submitted before the permittee is required to comply with the emission limits and work practice standards in Subpart UUUUU.

[40 CFR 63.9984(c)]

[Explanatory note: EPA Region 8 enforcement office verbally informed Deseret Power that initial notification under Subpart UUUUU was due on August 14, 2012. Deseret Power replied via October 11, 2012 letter that the title V permit application of April 3, 2012 provided this notification.]

(ii) The permittee must demonstrate that compliance has been achieved, by conducting the required performance tests and other activities no later than 180 days after the applicable date of April 16, 2015 for existing EGUs.
 [40 CFR 63.9984(f)]

(iii) At all times, the permittee must meet each emission limit and work practice standard in Tables 2 and 3 of Subpart UUUUU that applies to the EGU at Bonanza plant, except as provided in §63.10009.

[40 CFR 63.9991(a)(1)]

[Explanatory note: §63.10009 pertains to emissions averaging across multiple EGUs. Since Deseret Power owns and operates only one EGU, §63.10009 is not applicable to Deseret Power. Also, Table 1 of Subpart UUUUU is not applicable to the EGU at Bonanza plant, because it is not a new or reconstructed EGU, as defined in Subpart UUUUU.]

(iv) At all times, the permittee must meet each operating limit in Table 4 of Subpart UUUUU that applies to the EGU at Bonanza plant.

[40 CFR 63.9991(a)(2)]

(v) The permittee may use the alternate SO_2 emission limit in Table 2 of Subpart UUUUU, but only if the EGU has a system using wet or dry FGD technology and SO_2 CEMS installed on the unit; and at all times, the permittee operates the wet or dry FGD technology installed on the unit consistent with §63.10000(b).

[40 CFR 63.9991(c)]

(vi) The emission limits and operating limits in Subpart UUUUU apply at all imes except during periods of startup and shutdown; however, the work practice requirements in Table 3 of Subpart UUUUU must be met during periods of startup or shutdown.

[40 CFR 63.10000(a)]

(vii) At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.10000(b)]

(viii) Initial performance testing is required for all units, to demonstrate compliance with the applicable emission limits.

[40 CFR 63.10000(c)(1)]

(ix) The permittee may conduct the initial performance testing in accordance with §63.10005(h), to determine whether the unit qualifies as a low emitting unit (LEE) for one or more applicable emissions limits, except that the permittee may not pursue the LEE option if the EGU is equipped with an acid gas scrubber and bypass stack exhaust configuration.

[40 CFR 63.10000(c)(1)(i)]

(x) For a qualifying LEE for Hg emissions limits, the permittee must conduct a 30-day performance test using Method 30B at least once every 12 calendar months to demonstrate continued LEE status.

[40 CFR 63.10000(c)(1)(ii)]

(xi) For a qualifying LEE of any other applicable emissions limits, the permittee must conduct a performance test at least once every 36 calendar months to demonstrate continued LEE status.

[40 CFR 63.10000(c)(1)(iii)]

(xii) If the EGU does not qualify under §63.10000(c)(1)(i) as a LEE for total non-mercury HAP metals, individual non-mercury HAP metals, or filterable PM, the permittee must demonstrate compliance through an initial performance test and must monitor continuous performance through either use of a PM continuous parametric monitoring system (PM CPMS), a PM CEMS, or compliance performance testing repeated quarterly.

If the permittee elects to use a PM CPMS, the permittee must establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the pollutant with which the permittee chooses to comply: total non-mercury HAP metals, individual non-mercury HAP metals, or filterable PM. The permittee will use the PM CPMS to demonstrate continuous compliance with this operating limit. The performance test must be repeated annually and the site-specific operating limit reassessed and adjusted in accordance with the results of the performance test.

Alternatively, the permittee may opt to install and operate a PM CEMS, certified in accordance with Performance Specification 11 and Procedure 2 of 40 CFR Part 60, Appendices B and F, respectively, in accordance with §63.10010(i).

[40 CFR 63.10000(c)(1)(iv)]

(xiii) If the EGU does not qualify as a LEE for hydrogen chloride (HCl), the permittee may demonstrate initial and continuous compliance through use of a HCl CEMS, installed and operated in accordance with Appendix B to Subpart UUUUU. Alternatively, the permittee may demonstrate initial and continuous compliance by conducting initial and quarterly performance stack tests for HCl. If the EGU uses wet or dry FGD technology, the permittee may alternatively install and operate a SO₂ CEMS in accordance with 40 CFR Part 75 to demonstrate compliance with the applicable SO₂ emission limit.

[40 CFR 63.10000(c)(1)(v)]

(xiv) If the EGU does not qualify as a LEE for mercury (Hg), the permittee must demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system, in accordance with Appendix A to Subpart UUUUU.

[40 CFR 63.10000(c)(1)(vi)]

(xv) If the permittee demonstrates compliance with any applicable emissions limit through use of a CMS that includes a CPMS as well as a CEMS, the permittee must develop a site-specific monitoring plan and submit this plan, if requested, at least 60 days before the initial performance evaluation (where applicable) of the CMS. The monitoring plan must address the provisions of §63.10000(d)(1) through (5). This requirement does not apply to affected sources with existing monitoring plans that apply to CEMS and CPMS prepared under Appendix B to 40 CFR Part 60 or 40 CFR Part 75, and that meet the requirements of §63.10010.

[40 CFR 63.10000(d)]

- (xvi) As part of the demonstration of continuous compliance, the permittee must perform periodic tune-ups of the EGU, according to §63.10021(e). [40 CFR 63.10000(e)]
- (xvii) <u>Affirmative defense for exceedance of emission limit during malfunction</u>. In response to an action to enforce the standard set forth in §63.9991, the permittee may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined in 40 CFR 63.2. Appropriate penalties may be assessed, however, if the permittee fails to meet its burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief. Specific provisions on affirmative defense are in §63.10001(a) and (b).

[40 CFR 63.10001]

- (b) <u>Testing and Initial Compliance Requirements</u>. [40 CFR 63.10005 through 63.10011]
 - (i) <u>General requirements</u>. The permittee must demonstrate initial compliance with applicable emission limits in Tables 1 and 2 of Subpart UUUUU

through performance testing, which may require collection of hourly electrical load data, establishment of operating limits, and CMS performance evaluations. Initial compliance must also be demonstrated for tune-up work practices, as well as for other requirements for existing EGUs in §63.9984. The permittee shall comply with any additional applicable provisions on demonstrating initial compliance at §63.10005(a)(1) and (2). [40 CFR 63.10005(a)]

(ii) <u>Performance testing requirements</u>. Performance tests must be conducted according to \$63.10007 and Table 5 to Subpart UUUUU. The permittee shall comply with all additional applicable provisions on performance testing at \$63.10005(b)(1) through (5).

[40 CFR 63.10005(b)]

 (iii) <u>Operating limits</u>. In accordance with §63.10010 and Table 4 to Subpart UUUUU, the permittee may be required to establish operating limits using PM CPMS as part of the initial compliance demonstration.

[40 CFR 63.10005(c)]

(iv) <u>CMS requirements</u>. If, for a particular emission or operating limit, the permittee is required to (or elects to) demonstrate initial compliance using a CMS, the CMS must pass a performance evaluation prior to the initial compliance demonstration. The permittee shall comply with all additional applicable CMS provisions at §63.10005(d)(1) through (3).

[40 CFR 63.10005(d)]

(vi) <u>Tune-ups</u>. All affected EGUs are subject to the work practice standards in Table 3 of Subpart UUUUU. As part of the initial compliance demonstration, the permittee must conduct a performance tune-up of the EGU according to §63.10021(e).

[40 CFR 63.10005(e)]

For existing affected sources, a tune-up may occur prior to April 16, 2012, so that existing sources without neural networks have up to 42 calendar months (3 years from promulgation plus 180 days) or, in the case of units employing neural network combustion controls, up to 54 calendar months (48 months from promulgation plus 180 days) after the date that is specified for your source in §63.9984 and according to the applicable provisions of §63.7(a)(2) as cited in Table 9 to Subpart UUUUU, to demonstrate compliance with this requirement. If a tune-up occurs prior to such date, the source must maintain adequate records to show that the tune-up met the requirements of this standard.

[40 CRR 63.10005(f)]

(vii) Low-emitting EGU (LEE). An EGU may qualify for LEE status for Hg, HCl, HF, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, if performance test data are collected that meet the requirements of §63.10005(h), and if those data demonstrate that emissions are below the levels specified in §63.10005(h)(1). For all pollutants except Hg, all required performance tests described in §63.10007 must be conducted to demonstrate that a unit qualifies for LEE status. For Hg, the procedures described in §63.10005(h)(3) must be used to determine whether a unit qualifies for LEE status.

[40 CFR 63.10005(h)]

(viii) <u>Startup and shutdown</u>. The permittee must follow the requirements given in Table 3 to Subpart UUUUU.

[40 CFR 63.10005(j)]

 (ix) <u>Notification of compliance status</u>. The permittee must submit a Notification of Compliance Status, summarizing the results of the initial compliance demonstration, as provided in §63.10030.

[40 CFR 63.10005(k)]

(x) <u>Subsequent performance tests and tune-ups</u>. [40 CFR 63.10006]

For EGUs using PM CPMS to monitor continuous performance with an applicable emission limit as provided for under §63.10000(c), the permittee must conduct all applicable performance tests according to Table 5 to Subpart UUUUU and §63.10007 at least every year.

[40 CFR 63.10006(a)]

For affected units meeting the LEE requirements of §63.10005(h), the permittee must repeat the performance test once every 3 years (once every year for Hg) according to Table 5 and §63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur, subsequent testing must be conducted as specified in §63.10006(b).

[40 CFR 63.10006(b)]

Except where 63.10006(b) applies, coal-fired EGUs that do not use either an HCl CEMS to monitor compliance with the HCl limit or an SO₂ CEMS to monitor compliance with the alternate equivalent SO₂ emission limit, the permittee must conduct all applicable periodic HCl emissions tests according to Table 5 to Subpart UUUUU and 63.10007 at least quarterly, except as otherwise provided in 63.10021(d)(1).

[40 CFR 63.10006(d)]

Unless the permittee follows the requirements listed in §§63.10006(g) and (h), performance tests required at least every 3 calendar years must be completed within 35 to 37 calendar months after the previous performance test; performance tests required at least every year must be completed within 11 to 13 calendar months after the previous performance test; and performance tests required at least quarterly must be completed within 80 to 100 calendar days after the previous performance test, except as otherwise provided in §63.10021(d)(1).

[40 CFR 63.10006(f)]

If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and the permittee chooses to reapply for LEE status, the permittee must conduct performance tests at the appropriate frequency given in §63.10006(c) through (e) for that pollutant, until all performance tests over a consecutive 3-year period show compliance with the LEE criteria.

[40 CFR 63.10006(h)]

If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct a performance tune-up according to §63.10021(e).

[40 CFR 63.10006(i)]

The permittee must report the results of performance tests and performance tune-ups within 60 days after completion of the test or tune-up. The reports for all subsequent performance tests must include all applicable information required in §63.10031.

[40 CFR 63.10006(j)]

(xi) <u>Methods and other procedures that must be used for performance tests</u>. [40 CFR 63.10007]

Except as otherwise provided in §63.10007, the permittee must conduct all required performance tests according to §63.7(d), (e), (f), and (h). The permittee must also develop a site-specific test plan according to the requirements in §63.7(c).

If the permittee uses CEMS (Hg, HCl, SO₂, or other) to determine compliance with a 30-boiler operating day rolling average emission limit, the permittee must collect data for all nonexempt unit operating conditions (see §63.10011(g) and Table 3 to Subpart UUUUU).

If the permittee conducts performance testing with test methods in lieu of continuous monitoring, the permittee must operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. Maximum normal operating load will be generally between 90 and 100 percent of design capacity but should be representative of site specific normal operations during each test run.

[40 CFR 63.10007(a)]

The permittee must conduct each performance test according to the requirements in Table 5 to Subpart UUUUU. This includes traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data (or sorbent trap monitoring system data), and 30-boiler operating day Hg emission tests for LEE qualification.

[40 CFR 63.10007(b)]

If the permittee chooses to comply with the filterable PM emission limit and demonstrate continuous performance using a PM CPMS for an applicable emission limit as provided for in §63.10000(c), the permittee must also establish an operating limit according to §63.10011(b) and Tables 4 and 6 to Subpart UUUUU. Should the permittee desire to have operating limits that correspond to loads other than maximum normal operating load, the permittee must conduct testing at those other loads to determine the additional operating limits.

[40 CFR 63.10007(c)]

Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, where the concept of test runs does not apply, the permittee must conduct a minimum of three separate test runs for each performance test, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling time or volume specified in Table 2 to Subpart UUUUU. §63.10005(d) and (h), respectively, provide special instructions for conducting performance tests based on CEMS or sorbent trap monitoring systems, and for conducting emission tests for LEE qualification.

[40 CFR 63.10007(d)]

To use the results of performance testing to determine compliance with the applicable emissions limits in Table 2 to Subpart UUUUU, proceed as specified in 63.10007(e)(1) through (3).

[40 CFR 63.10007(e)]

Upon request, the permittee shall make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements of §63.10007. [40 CFR 63.10007(f)] [Explanatory note: §63.10009 pertains to emissions averaging across multiple EGUs. Since Deseret Power owns and operates only one EGU, §63.10009 is not applicable to Deseret Power. The provisions of §63.10009 are therefore not included in this permit.]

(xii) <u>Monitoring, installation, operation and maintenance requirements</u>. [40 CFR 63.10010]

For the CEMS, PM CPMS, and sorbent trap monitoring systems used to provide data under Subpart UUUUU, the continuous monitoring system installation requirements are as follows, for the single-unit, single-stack configuration applicable to Bonanza plant:

For an affected unit that exhausts to the atmosphere through a single, dedicated stack, the permittee shall either install the required CEMS, PM CPMS, and sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere.

[40 CFR 63.10010(a)(1)]

[Explanatory note: Deseret Power's Bonanza plant has a single unit, single-stack configuration, therefore §63.10010(a)(1) is applicable to Bonanza plant.]

If the permittee uses an oxygen (O_2) or carbon dioxide (CO_2) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O_2 or CO_2 concentrations shall be monitored at a location that represents emissions to the atmosphere, i.e., at the outlet of the EGU, downstream of all emission control devices. The CEMS must be installed, certified, maintained and operated according to 40 CFR Part 75. Only quality-assured O_2 or CO_2 data may be used in the emissions calculations. Part 75 substitute data values may not be used.

[40 CFR 63.10010(b)]

If the permittee is required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to Subpart UUUUU, the permittee must install, certify, operate and maintain the monitoring system and conduct ongoing quality-assurance testing of the system according to Part 75. Only unadjusted, quality-assured flow rate data may be used in the emissions calculations. Bias adjustment factors may not be applied to the flow rate data and substitute flow rate data may not be used in the calculations.

If the permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to Subpart UUUUU, the permittee must install, certify, operate, and maintain a moisture monitoring system in accordance with Part 75. Alternatively, for coal-fired units, appropriate fuel-specific default moisture values from §75.11(b) may be used to estimate the moisture content of the stack gas. If a moisture monitoring system is installed and operated, substitute moisture data may not be used in the emissions calculations.

[40 CFR 63.10010(d)]

If the permittee uses an HCl and/or HF CEMS, the permittee must install, certify, operate, maintain, and quality-assure the data from the monitoring system in accordance with Appendix B to Subpart UUUUU. The permittee must calculate and record a 30-boiler operating day rolling average HCl or HF emission rate in the units of the standard, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all the valid hourly HCl or HF emission rates in the preceding 30 boiler operating days (see section 9.4 to Appendix B to Subpart UUUUU).

[40 CFR 63.10010(e)]

If the permittee uses an SO₂ CEMS, the permittee must install the monitor at the outlet of the EGU, downstream of all emission control devices, and must certify, operate and maintain the CEMS according to Part 75. The SO₂ CEMS shall be operated and emissions calculated in accordance with §63.10010(f)(2) through (4).

[40 CFR 63.10010(f)]

If the permittee uses a Hg CEMS or a sorbent trap monitoring system, the permittee must install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with Appendix A to Subpart UUUUU. Emissions shall be calculated in accordance with the procedures in §63.10010(g).

[40 CFR 63.10010(g)]

If the permittee uses a PM CPMS to demonstrate continuous compliance with an operating limit, the permittee must install, calibrate, maintain, and operate the PM CPMS and record the output of the system as specified in 63.10010(h)(1) through (5). All the data collected during all boiler operating hours must be used in assessing compliance with the operating limit, with the exception of data described in 63.10010(h)(6)(i) through (iii). The permittee must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with the permittee's site-specific monitoring plan.

[40 CFR 63.10010(h)]

If the permittee chooses to comply with the PM filterable emissions limit in lieu of metal HAP limits, the permittee may choose to install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS as specified in §63.10010(i)(1) through (5). The compliance limit will be expressed as a 30-boiler operating day rolling average of the numerical emissions limit value applicable to the unit in Table 2 of Subpart UUUUU. [40 CFR 63.10010(i)]

The permittee may choose to comply with the metal HAP emissions limits using CEMS approved in accordance with §63.7(f), as an alternative to the performance test method specified in this rule. Specific requirements pertaining to this alternative are in §63.10010(j).

[40 CFR 63.10010(j)]

(xiii) <u>Demonstrating initial compliance with emission limits and work practice</u> <u>standards</u>. [40 CFR 63.10011]

The permittee must demonstrate initial compliance with each emissions limit that applies to Bonanza plant by conducting performance testing.

If the permittee is subject to an operating limit in Table 4 to Subpart UUUUU, the permittee demonstrates initial compliance with HAP metals or filterable PM emission limit(s) through performance stack tests. If the permittee elects to use a PM CPMS to demonstrate continuous performance, the permittee must also establish a site-specific operating limit, in accordance with Table 4 of subpart UUUUU, §63.10007, and Table 6 to Subpart UUUUU. The permittee may use only the parametric data recorded during successful performance tests (i.e., tests that demonstrate compliance with the applicable emissions limits) to establish an operating limit.

[40 CFR 63.10011(b)]

If the permittee uses CEMS or sorbent trap monitoring systems to measure a HAP (e.g., Hg or HCl) directly, the first 30-boiler operating day (or, if alternate emissions averaging is used for Hg, the 90-boiler operating day) rolling average emission rate obtained with certified CEMS after the applicable date in §63.9984 (or, if applicable, prior to that date, as described in §63.10005(b)(2)), expressed in units of the standard, is the initial performance test. Initial compliance is demonstrated if the results of the performance test meet the applicable emission limit in Table 2 to Subpart UUUUU.

[40 CFR 63.10011(c)(1)]

For a unit that uses a CEMS to measure SO_2 or PM emissions for initial compliance, the first 30-boiler operating day average emission rate obtained with certified CEMS after the applicable date in §63.9984 (or, if applicable, prior to that date, as described in §63.10005(b)(2)), expressed in units of the standard, is the initial performance test. Initial compliance is demonstrated of the results of the performance test meet the applicable SO_2 or filterable PM emission limit in Table 2 to Subpart UUUUU.

[40 CFR 63.10011(c)(2)]

For candidate LEE units, use the results of the performance testing described in 63.10005(h) to determine initial compliance with the applicable emission limits(s) in Table 2 to this subpart and to determine whether the unit qualifies for LEE status.

[40 CFR 63.10011(d)]

The permittee must submit a Notification of Compliance Status containing the results of the initial compliance demonstration, according to \$63.10030(e).

[40 CFR 63.10011(e)]

The permittee must follow the startup or shutdown requirements given in Table 3 of Subpart UUUUU for each coal-fired EGU.

[40 CFR 63.10011(g)]

(c) <u>Continuous Compliance Requirements</u>. [40 CFR 63.10020 through 63.10023]

(i) <u>Monitoring and collecting data to demonstrate continuous compliance</u>. [40 CFR 63.10020]

The permittee must monitor and collect data according to \$63.10020 and the site-specific monitoring plan required by \$63.10000(d). [40 CFR 63.10020(a)]

The permittee must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for permits of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required

zero and span adjustments. The permittee is required to conduct monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

[40 CFR 63.10020(b)]

The permittee may not use data recorded during EGU startup or shutdown or monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities, in calculations used to report emissions or operating levels. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

[40 CFR 63.10020(c)]

Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation from the monitoring requirements.

[40 CFR 63.10020(d)]

Demonstrating continuous compliance with emission limitations, operating limits and work practice standards. [63.10021]

The permittee must demonstrate continuous compliance with each emissions limit, operating limit, and work practice standard in Tables 2 through 4 of Subpart UUUUU that applies to the EGU at Bonanza plant, according to the monitoring specified in Table 6 and 7 to Subpart UUUUU and §63.10021(b) through (g).

[40 CFR 63.10021(a)]

Except as otherwise provided in §63.10020(c), if the permittee uses a CEMS to measure SO₂, PM, HCl, HF, or Hg emissions, or uses a sorbent trap monitoring system to measure Hg emissions, the permittee must demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate, CO₂, O₂, or moisture systems) to calculate the arithmetic average emission rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis,

(ii)

updated at the end of each new boiler operating day. Use Equation 8 in §63.10021(b) to determine the 30- (or, if applicable, 90-) boiler operating day rolling average.

[40 CFR 63.10021(b)]

If the permittee uses PM CPMS data to measure compliance with an operating limit in Table 4 to Subpart UUUUU, the permittee must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. The permittee must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (e.g., milliamps, PM concentration, raw data signal) on a 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day. Use Equation 9 in §63.10021(c) to determine the 30-boiler operating day average.

[40 CFR 63.10021(c)]

If the permittee uses quarterly performance testing to demonstrate compliance with one or more applicable emissions limits in Table 2 to Subpart UUUUU, the permittee must conduct the performance test as defined in Table 5 to Subpart UUUUU, and calculate the results of the testing in units of the applicable standard. The permittee may skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test must be conducted at least once every calendar year.

[40 CFR 63.10021(d)]

If the permittee must conduct periodic performance tune-ups of the EGU, as specified in §63.10021(e)(1) through (9), the permittee must perform the first tune-up as part of the initial compliance demonstration. Notwithstanding this requirement, the permittee may delay the first burner inspection until the next scheduled unit outage, provided the permittee meets the requirements of §63.10005. Subsequently, the permittee must perform an inspection of the burner at least once every 36 calendar months, unless the EGU employs neural network combustion optimization during normal operations, in which case an inspection of the burner and combustion controls must be performed at least once every 48 calendar months.

[40 CFR 63.10021(e)]

The permittee must submit the reports required under §63.10031 and, if applicable, the reports required under appendices A and B to Subpart UUUUU. The electronic reports required by appendices A and B to Subpart

UUUUU must be sent to the Administrator electronically in a format prescribed by the Administrator, as provided in §63.10031. CEMS data (except for PM CEMS and any approved alternative monitoring using a HAP metals CEMS) shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including PM CEMS data, HAP metals CEMS data, and CEMS performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under §63.10031.

[40 CFR 63.10021(f)]

The permittee must report each instance in which the permittee did not meet an applicable emissions limit or operating limit in Tables 2 through 4 to Subpart UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of Subpart UUUUU. These deviations must be reported according to §63.10031.

[40 CFR 63.10021(g)]

The permittee must keep records as specified in §63.10032 during periods of startup and shutdown.

[40 CFR 63.10021(h)]

The permittee must provide reports as specified in §63.10031, concerning activities and periods of startup and shutdown.

[40 CFR 63.10021(i)]

[Explanatory note: §63.10022 pertains to emissions averaging across multiple EGUs. Since Deseret Power owns and operates only one EGU, §63.10022 is not applicable to Deseret Power. The provisions of §63.10022 are therefore not included in this permit.]

(iii) Establishing a PM CPMS operating limit and determining compliance with <u>it</u>. [40 CFR 63.10023]

During the initial performance test or any such subsequent performance test that demonstrates compliance with the filterable PM individual non-mercury HAP metals, or total non-mercury HAP metals limit in Table 2, record all hourly average output values (e.g., milliamps, stack concentration, or other raw data signal) from the PM CPMS for the periods corresponding to the test runs (e.g., nine 1-hour average PM CPMS output values for three 3-hour test runs).

[40 CFR 63.10023(a)]

Determine the operating limit as the highest 1-hour average PM CPMS output value recorded during the performance test. The permittee must verify an existing or establish a new operating limit after each repeated performance test.

[40 CFR 63.10023(b)] The permittee must operate and maintain the process and control equipment such that the 30 operating day average PM CPMS output does not exceed the operating limit determined in §63.10023(a) and (b).

[40 CFR 63.10023(c)]

(d) <u>Notification, Reports and Records</u>. [40 CFR 63.10030 through 63.10033]

(i) <u>Notifications</u>. [40 CFR 63.10030]

The permittee must submit all of the notifications in (63.7(b)) and (c), (63.8(c)), (f)(4) and (6), and (63.9(b)) through (h) that apply to the permittee, by the dates specified.

[40 CFR 63.10030(a)]

As specified in §63.9(b)(2), if the permittee started up the affected source before April 16, 2012, the permittee must submit an Initial Notification not later than 120 days after April 16, 2012.

[40 CFR 63.10030(b)]

[Explanatory note: Initial notification under 40 CFR 63 subpart UUUUU was provided by Deseret Power on April 3, 2012, via submittal of an updated title V permit application.]

When the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

[40 CFR 63.10030(d)]

When the permittee is required to conduct an initial compliance demonstration as specified in §63.10011(a), the permittee must submit a Notification of Compliance status according to §63.9(h)(2)(ii). The Notification of Compliance Status report must contain all the information specified in §63.10030(e)(1) through (7), as applicable.

[40 CFR 63.10030(e)]

(ii) <u>Reports</u>. [40 CFR 63.10031]

The permittee must submit each report in Table 8 to Subpart UUUUU that applies to the permittee. If the permittee is required to (or elects to)

continuously monitor Hg and/or HCl and/or HF emissions, the permittee must also submit the electronic reports required under Appendix A and/or Appendix B to Subpart UUUUU, at the specified frequency.

[40 CFR 63.10031(a)]

Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee must submit each report by the date in Table 8 to Subpart UUUUU and according to the requirements in §63.10031(b)(1) through (5).

[40 CFR 63.10031(b)]

The compliance report must contain the information required in (63.10031(c)(1)) through (4).

[40 CFR 63.10031(c)]

For each excess emissions occurring at an affected source where a CMS is being used to comply with that emission limit or operating limit, the permittee must include the information required in (3.10(e)(3)(v)) in the compliance report specified in (3.10031(c)).

[40 CFR 63.10031(d)]

Each affected source that has obtained a Title V operating permit pursuant to Part 70 or Part 71 must report all deviations as defined in Subpart UUUUU in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 to Subpart UUUUU along with, or as part of, the semiannual monitoring required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in Subpart UUUUU, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 CFR 63.10031(e)]

As of January 1, 2012, and within 60 days after the date of completing each performance test, the permittee must submit the results of the performance tests required by Subpart UUUUU to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT)

(see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using those test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE.

Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described above. At the discretion of the delegated authority, the permittee must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority.

The permittee shall also comply with reporting requirements in 63.10031(f)(1) through (5), pertaining to reports of CEMS performance evaluations; quarterly compliance and emissions data reporting for PM CEMS, PM CPMS and approved alternative monitoring using a HAP metals CEMS; and reports for SO₂ CEMS, Hg CEMS or sorbent trap monitoring system, an HCl or HF CEMS, and any supporting monitors for such systems (such as a diluent or moisture monitor).

[40 CFR 63.10031(f)]

If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused, or may have caused, any applicable emission limitation to be exceeded.

[40 CFR 63.10031(g)]

(iii)

<u>Records</u>. [40 CFR 63.10032, 63.10033]

The permittee must keep records according to (63.10032(a)(1)) and (2).

For each CEMS and CPMS, the permittee must keep records according to §63.10032(b)(1) through (4).

The permittee must keep the records required in Table 7 to Subpart UUUUU, including records of all monitoring data and calculated averages for applicable PM CPMS operating limits to show continuous compliance with each emission limit and operating limit that applies to the permittee. For each EGU subject to an emission limit, the permittee must also keep the records in (3.10032(d)(1)) through (3).

The permittee must keep records of the occurrence and duration of each startup and/or shutdown.

The permittee must keep records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment.

The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee must keep records of the type(s) and amount(s) of fuel used during each startup and shutdown.

[40 CFR 63.10032]

Records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. Each record must be kept on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). Records can be kept off site for the remaining 3 years. [40 CFR 63.10033]

(e) <u>Other Requirements and Information</u>. [40 CFR 63.10040]

The permittee shall comply with all applicable General Provisions in 40 CFR 63.1 through 63.15, as shown in Table 9 to Subpart UUUUU.

[40 CFR 63.10040]

4. <u>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating</u> <u>Internal Combustion Engines</u> [40 CFR Part 63, Subpart ZZZZ]

- (a) <u>Existing emergency diesel fire pump (498 hp, started up in mid-1980's)</u>.
 - (i) Beginning no later than June 15, 2007, the permittee shall comply with the following requirements in Table 2c of Subpart ZZZZ, applicable to existing emergency CI RICE with a site rating of \leq 500 brake HP, located at a major

source of HAP emissions:

- (A) Except during periods of startup:
 - (1) Change oil and filter every 500 hours of operation or annually, whichever comes first.
 - (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- (B) During periods of startup:
 - (1) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup requirements apply.

The permittee shall report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[40 CFR 63.6595(a)(1), 63.6602, Table 2c of Subpart ZZZZ]

(ii) The permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i), in order to extend the specified oil change requirement in Table 2c.

[40 CFR 63.6625(i)]

(iii) The permittee shall install a non-resettable hour meter if one is not already installed.

[40 CFR 63.6625(f)]

(iv) The permittee shall demonstrate continuous compliance by operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions, or develop and follow the permittee's own maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e), 63.6640(a), Table 6 of Subpart ZZZZ]

(v) The permittee shall report each instance in which it did not meet an applicable operating limitation in Table 2c of Subpart ZZZZ. These instances are deviations from the operating limitations. These deviations shall be reported according to the requirements in §63.6650. [40 CFR 63.6640(b)]

(vi) The permittee shall operate the stationary RICE according to the requirements of 40 CFR 63.6640(f)(2) and (3). In order for the engine to be considered an emergency stationary RICE under Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 or more hours per year, as described in §63.6640(f)(2) and (3), is prohibited. If the permittee does not operate the engine according to §63.6640(f)(2) and (3), the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.

[40 CFR 63.6640(f)]

(vii) There is no time limit on the use of emergency stationary RICE in emergency situations.

[40 CFR 63.6640(f)(1)]

(viii) The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. If additional hours are to be used for maintenance checks and readiness testing, the permittee shall maintain records indicating that Federal, State, or local standards require maintenance testing of emergency RICE beyond 100 hours per year.

[40 CFR 63.6640(f)(2)(ii)]

(ix) The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent.

[40 CFR 63.6640(f)(3)]

(x) As specified in 63.9(b)(2), if the permittee starts up a stationary RICE with a site rating of ≤ 500 brake HP located at a major source of HAP emissions before the effective date of Subpart ZZZZ and is required to submit an initial notification, the permittee must submit an Initial Notification not later than July 16, 2008. However, the initial notification requirement does not apply to existing stationary emergency RICE. [40 CFR 63.9(b)(2), 63.6645(a)(5), 63.6650(d)]

- (xi) The permittee shall comply with all applicable recordkeeping requirements at §63.6655 and §63.6660. Records shall include, but are not necessarily limited to, the following:
 - (A) A copy of each notification that was submitted to comply with Subpart ZZZZ, including documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in §63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - (B) The permittee shall keep records of the hours of operation of the engine that are recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the permittee shall keep records of the notification of the emergency situation and the date, start time, and end time of engine operation for these purposes.

[40 CFR 63.6655(f)]

- (C) Records that demonstrate continuous compliance with each applicable operating limitation including, but not limited to, the manufacturer's emission-related operation and maintenance instructions or the permittee-developed maintenance plan. [40 CFR 63.6655(e)]
- (xii) The permittee shall comply with all applicable General Provisions in 40 CFR 63.1 through 63.15, as shown in Table 8 to Subpart ZZZZ.
 [40 CFR 63.6665]
- (b) <u>New emergency diesel generator (1,220 HP, started up on January 8, 2013)</u>.

If the permittee starts up a new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, the stationary RICE does not have to meet the requirements of Subparts A and ZZZZ of 40 CFR Part 63, except for the initial notification requirements of §63.6645(f). The permittee shall submit an Initial Notification not later than 120 days after the engine becomes subject to Subpart ZZZZ. The Notification should include the information in §63.9(b)(2)(i) through (v), a statement that the stationary RICE has no additional requirements, and explain the

basis for the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

[40 CFR 63.6590(b)(1)(i), 63.6600(c), 63.6645(c) and (f)]

[Explanatory note: Deseret Power submitted the required notification to EPA on April 4, 2013.]

5. <u>Standards of Performance for Stationary Compression Ignition Internal Combustion</u> <u>Engines</u> [40 CFR Part 60, Subpart IIII]

These requirements apply to the 1,220-horsepower emergency diesel generator which started up on January 8, 2013.

(a) <u>Emission standards</u>. The permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine.

[40 CFR 60.4205(b), 60.4206]

- (b) <u>Compliance requirements</u>. The permittee shall:
 - (i) Operate and maintain the engine and control device according to the manufacturer's emission-related written instructions;
 - (ii) Change only those emission-related settings that are permitted by the manufacturer; and
 - (iii) Meet the requirements of 40 CFR parts 89, 94, and/or 1068, as they apply to the engine.

[40 CFR 60.4211(a)]

Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. If the permittee does not install, configure, operate and maintain the engine according to the manufacturer's emission-related written instructions, or changes the emission-related settings in a way that is not permitted by the manufacturer, the permit shall demonstrate compliance in accordance with 40 CFR 60.4211(g)(3).

[40 CFR 60.4211(g)]

(c) <u>Fuel requirements</u>. Beginning October 1, 2010, the permittee shall purchase only diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

[40 CFR 60.4207(b)]

(d) <u>Testing requirements</u>. Performance tests conducted pursuant to Subpart IIII shall be done in accordance with 60.4212(a) through (e).

[40 CFR 60.4212]

(e) Notifications, reports and records. The permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

[40 CFR 60.4214(b)]

6. <u>Federal PSD Permit Issued February 2, 2001</u>. [40 CFR 52.21 and Federal PSD permit issued February 2, 2001]

This section II.A.6 incorporates provisions from the Federal PSD permit issued on February 2, 2001, that currently apply to the main boiler stack, except for 40 CFR Part 60 provisions, which are incorporated into sections II.A.1 and II.A.2 of this permit.

[Explanatory note: See "Compliance Schedule" at section III.D of this permit. As explained there, EPA has made a preliminary determination that it needs to correct the currently applicable PSD requirements for the facility due to an error in the Federal PSD permit issued on February 2, 2001. Within 60 days after EPA issues a final and effective Federal PSD permit correction, this permit will require the permittee to submit to EPA a request for an administrative permit amendment to revise the Part 71 permit to include the terms and conditions of the PSD permit correction. Additional information regarding this PSD permitting error and EPA's plan to correct it can be found in the Statement of Basis accompanying this draft permit.]

- (a) <u>Particulate matter emission limitations, testing and monitoring</u>.
 - (i) Particulate matter emissions from the main boiler stack shall not exceed

0.0297 lb/MMBtu of heat input as determined by the test methods and procedures specified by 40 CFR 60.50Da(b): Method 5B for concentration and dry basis F factor procedures of Method 19 for emission rate. Compliance tests shall be conducted at least once a year and no two consecutive tests shall be separated by more than 18 months, unless PM_{10} compliance test results for that year, required by paragraph (ii) below, show compliance with the PM_{10} emission limit in paragraph (ii) below, or unless a lesser testing frequency is requested by the permittee and is approved by the EPA Regional Office. EPA may require testing at any time in accordance with 40 CFR 60.8(a).

- (ii) PM₁₀ emissions from the main boiler stack shall not exceed 0.0286 lb/ MMBtu of heat input, as determined by 40 CFR Part 51, Appendix M, Method 201, Determination of PM₁₀ Emissions, or Method 201A, Determination of PM₁₀ Emissions (Constant Sampling Rate Procedure). Compliance with the PM₁₀ emission limit shall constitute compliance with the particulate matter emission limit. Compliance tests shall be conducted at least once a year and no two consecutive tests shall be separated by more than 18 months, unless a lesser testing frequency is requested by the permittee and is approved by the EPA Regional Office. EPA may require testing at any time in accordance with 40 CFR 60.8(a).
- (iii) For PM₁₀ testing, the permittee shall note if liquid drops are present in the main boiler stack and take methods to eliminate the liquid drops. If the permittee finds no reasonable method to eliminate the drops, then the permittee shall use the following methods: 40 CFR Part 60, Appendix A, Method 5, 5A, 5B, 5D, 5E, 5G, 5H, or 40 CFR Part 51, Appendix M, Method 201 or 201A, as appropriate. The permittee shall test the back half condensibles using the method specified by EPA. The results of the 40 CFR Part 60 or Part 51 test shall be added to the results of the back half condensibles test and the total shall be considered PM₁₀.
- (iv) Sampling location for particulate and PM₁₀ shall be as specified in 40 CFR Part 60, Appendix A, Method 1. Volumetric flow rate shall be determined as specified in 40 CFR Part 60, Appendix A, Method 2, Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube) or Methods 2E, 2F, 2G, and 3D or an alternative method that has EPA's approval.
- (v) As provided for by 40 CFR 60.8(b), the permittee may request that alternative EPA-approved test methods be used for particulate matter and PM_{10} instead of those cited in this permit.
- (vi) Visible emissions from the main boiler stack shall not exceed the limits

specified in 40 CFR 60.42a(b), as determined by Method 9 (the method required by 40 CFR 60.11(b) and 60.42a(b)). A COMS shall be installed, calibrated, maintained and operated for measuring opacity of emissions, as required by 40 CFR 60.47a(a).

- (vii) During periods when the COMS is inoperative, the permittee may use Method 9. If Method 9 is used for such periods, the permittee shall take at least one six-minute Method 9 reading during each and every daylight hour and shall record the Method 9 data in the COMS operating log.
- (viii) <u>Compliance Assurance Monitoring (CAM)</u>. The following requirements are proposed under authority of 40 CFR Part 64. EPA has determined that Part 64 is applicable to the Bonanza power plant, in regard to the filterable PM emission limit of 0.0297 lb/MMBtu and the filterable PM₁₀ emission limit of 0.0286 lb/MMBtu at the main boiler (Unit 1). Emissions are controlled by two baghouses in parallel, each containing twelve compartments, for a total of 24 compartments.
 - (A) Indicator #1:

<u>Indicator selected</u>: Beginning immediately after the effective date of this Permit, the permittee shall monitor the number of baghouse compartments in service, at each of the two baghouses controlling PM emissions from the main boiler (Unit 1).

<u>Indicator range</u>: The CAM indicator range shall be no less than four of the total of 24 baghouse compartments in service at any one time.

<u>Definition of excursion</u>: An excursion shall be defined as any time that less than four of the 24 baghouse compartments are in service at any one time.

<u>Data averaging</u>: The number of in-service compartments shall not be averaged over a given time period, but shall instead be monitored continuously by the plant's Distributed Control System (DCS).

<u>Monitoring approach</u>: The number of in-service baghouse compartments shall be continuously monitored by the DCS. An automated system of monitoring each individual compartment's operating status shall communicate the status of all compartments to the DCS, summing the number of compartments in service at any time. The number of in-service compartments will also be monitored visually by operators on DCS screens. Compartment status information will be maintained no less frequently than each six minutes and stored electronically.

<u>Identification of excursions</u>: The automated monitoring system shall produce a warning if fewer than seven compartments are in service, and shall produce a visual and audible alarm if fewer than four are in service.

<u>Corrective action for excursions</u>: If an excursion as defined above occurs, corrective action shall be taken immediately to return the baghouses to normal operation as quickly as practicable and eliminate the excursion, in accordance with good air pollution control practices for minimizing emissions.

(B) <u>Indicator #2</u>:

<u>Indicator selected</u>: Beginning no later than 180 days after the effective date of this Permit, the permittee shall install, calibrate, and begin using a Particulate Matter Continuous Emissions Monitoring System (PM CEMS) at the Unit 1 main stack, to monitor the filterable PM emissions in lb/MMBtu.

<u>Indicator range</u>: The CAM indicator range shall be 0.0286 lb/MMBtu for total filterable PM, based on PM CEMS readings.

<u>Definition of excursion</u>: An excursion shall be defined as any PM CEMS reading that exceeds 0.0286 lb/MMBtu, averaged over a continuous 90-minute period.

<u>Data averaging</u>: PM CEMS readings shall be averaged over continuous 90-minute periods, to ensure consistent data readings and eliminate data communication (i.e., telemetry) errors.

Monitoring approach: PM CEMS shall be installed and operated at the Unit1 main stack, at the same level in the stack where EPA Reference Method 5 (RM5) testing is conducted.

<u>Monitoring QA/QC</u>: An initial calibration/correlation test shall be performed on the PM CEMS prior to finalizing the installation. The correlation procedure shall be developed in cooperation with the PM CEMS manufacturer, using methodology designed to be substantively consistent with procedures specified for correlation as if the PM CEMS were subject to EPA Performance Specification 11, so as to reliably address and establish an initial site-specific correlation of the PM CEMS response against manual gravimetric reference method measurements using RM5. Correlation means the primary mathematical relationship for correlating the output from the PM CEMS to a PM concentration, as determined by the PM reference method. The correlation is expressed in the measurement units that are consistent with the measurement conditions (e.g., lb/MMBtu) of the PM CEMS.

A zero and span check/calibration of the PM CEMS shall be performed daily. The PM CEMS shall be adjusted, if needed, according to the instrument manufacturer's standards. This check/calibration shall also be performed after any PM CEMS maintenance activity.

At least once every 12 months, the calibration of the PM CEMS shall be verified using RM5 (three runs). If the average of the three runs differs from the PM CEMS reading by more than 25% of the PM or PM_{10} emission limit, then the PM CEMS shall be re-calibrated to match the RM5 test average.

<u>Identification of excursions</u>: PM CEMS shall be used to identify excursions.

<u>Corrective action for excursions</u>: If an excursion as defined above occurs, corrective action shall be taken immediately to eliminate the cause of the excursion. Corrective action may include, but is not limited to, verification of the baghouse operating status and corrective maintenance and/or repair to baghouse compartments, as necessary to restore operation of the baghouse to its normal or usual manner of operation as expeditiously as practicable, in accordance with good air pollution control practices for minimizing emissions.

If excursions still occur after corrective action is taken, a RM5 test (three runs) shall be conducted, as expeditiously as practicable, under conditions representative of the excursion, to determine compliance with the total filterable PM emission limit. If RM5 results are in excess of the emission limit, further corrective action shall immediately be taken at the baghouses. If RM5 results are not in excess of the emission limit, corrective action shall be taken at the PM CEMS, to resolve the discrepancy between PM CEMS readings and RM5 results.

(C) <u>CAM reporting and recordkeeping</u>: Any CAM excursions and corrective actions shall be reported to EPA with the quarterly emission reports required under 40 CFR part 60, subpart Da. The

CAM reports shall include the information required by 40 CFR 64.9(a). Records shall be kept as required by 40 CFR 64.9(b).

(b) <u>Sulfur dioxide emission limitations, testing and monitoring</u>.

- (i) SO₂ emissions from the main boiler stack shall not exceed 0.0976 lb/MMBtu of heat input, based on a 12-month rolling average. Compliance shall be determined from the CEMS and fuel heat input data required to be collected by Subpart Da of 40 CFR Part 60, and by using the procedures specified in Subpart Da, except that calculations shall be for a 12-month average rather than a 30-day average. On the first day of each month, a new 12-month average shall be calculated using data from the previous 12 months.
- (ii) SO₂ emissions from the main boiler stack shall not exceed 0.15 lb/MMBtu of heat input and 10 percent of the potential combustion concentration (90 percent reduction), based on a 30-day rolling average. Compliance shall be determined from the CEMS and fuel heat input data required to be collected by Subpart Da of 40 CFR Part 60, and by using the procedures specified in Subpart Da.
- (iii) For purposes of conducting SO₂ CEMS performance evaluations, and as provided for in 40 CFR 60.8(b) and 60.47a(j), the permittee may request that alternative EPA-approved test methods be used for SO₂ instead of Method 6 cited in 40 CFR 60.47a(h) and condition II.A.2.e(viii) of this permit.
- (iv) The permittee may use scrubber slurry additives, such as adipic acid, lime, etc., to increase the dissolved alkalinity of the slurry reagent used in the FGD wet scrubber.
- (c) <u>Nitrogen oxide emission limitations, testing and monitoring</u>.

The NO_x emissions from the main boiler stack shall not exceed 0.50 lbs/MMBtu of heat input when subbituminous coal is fired, or 0.55 lbs/MMBtu of heat input when bituminous coal is fired, based on a 30-day rolling average. If subbituminous and bituminous coal are fired simultaneously, the applicable NO_x emission standard shall be determined by proration using the formula in 40 CFR 60.44a(c), but in no event shall be greater than 0.55 lbs/MMBtu on a 30-day rolling average. Compliance shall be determined from the CEMS and fuel heat input data required to be collected by Subpart Da of 40 CFR Part 60, and by using the procedures specified in Subpart Da.

(d) <u>CEMS quality assurance procedures</u>.

The permittee shall conduct performance evaluations of the SO₂ and NO_x CEMS as required by 40 CFR Part 60, Appendix F, Quality Assurance Procedures, Procedure 1: Quality Assurance Procedures for Gas Continuous Emission Monitoring Systems Used for Compliance Determinations (referenced by 40 CFR 60.13(a)). The permittee shall conduct all calibration drift assessments and adjustments, relative accuracy test audits, cylinder gas audits, and relative accuracy audits as may be required by Appendix F. Audits shall be no less frequent than required by Appendix F. The permittee shall submit to the EPA Region 8 Office the Data Assessment Report for each CEMS audit required by Appendix F.

(e) <u>Pretest conference</u>.

For any particulate, PM_{10} , SO_2 or NO_x stack tests, a pretest conference shall be held if requested by the EPA Region 8 Office, at least 30 days before the test, between the permittee, the tester, and the EPA Region 8 Office.

(f) <u>Major modifications</u>.

This facility is a "major stationary source" as defined in 40 CFR 52.21(b)(1). For any modifications to a "major stationary source" which meet the definition of "major modification" in 40 CFR 52.21(b)(2), a pre-construction permit is required under §52.21, prior to commencement of construction of such modifications.

7. <u>Compliance Assurance</u>. [40 CFR 71.6(c)(1)]

Requirements in this section II.A.7. have been developed under authority of 40 CFR 71.6(c)(1), to provide for reasonable assurance of compliance with condition II.A.6 of this permit, and do *not* constitute a CAM plan under the Compliance Assurance Monitoring Rule (40 CFR Part 64). These requirements are in addition to requirements of 40 CFR Part 64 and condition II.A.6.(a)(viii) of this Permit.

- (a) <u>Particulate/PM₁₀</u>. For purposes of conducting the annual particulate and PM₁₀ stack emission tests required under section II.A.6.(a) of this permit, in addition to meeting the stack emission testing requirements of 40 CFR Part 60 (sections II.A.1 and II.A.2 of this permit) and of the Federal PSD permit dated February 2, 2001 (section II.A.6 of this permit), the permittee shall comply with the following test-related requirements for assuring compliance under 40 CFR 71.6(c)(1).
 - (i) <u>Stack emission test plan</u>. A stack test plan for particulate/ PM_{10} shall be submitted to the EPA Regional Office, at least 45 days prior to each annual particulate/ PM_{10} test. The only exception shall be that if an annual test is scheduled to occur less than three months after issuance of this initial Part

71 operating permit, a stack test plan shall not be required until 45 days prior to the next annual test. The test plan shall include and address the following elements:

- (A) Schedule/dates for test
- (*B*) Pollutant(s) to be tested (particulate and/or PM_{10})
- (*C*) Expected operating rate(s) during test
- (D) Related emission control device parameters or other plant operating parameters to be monitored during emission test
- (*E*) Sampling and analysis procedures
 - (1) Sampling locations
 - (2) Test method(s)
 - (3) Analysis procedures and laboratory identification
- (F) Quality assurance plan
 - (1) Calibration procedures and frequency
 - (2) Sample recovery and field documentation
 - (3) Chain-of-custody procedures
- (G) Data processing and reporting
 - (1) Description of data handling and quality control procedures
 - (2) Report content

If a stack test plan for an annual particulate/ PM_{10} test has been submitted that addresses all of the above elements, the stack test plans for subsequent annual tests must contain only elements (*A*) and (*B*) above, along with any other elements listed above that have changed from the test plan previously submitted.

(ii) <u>Operating rate during stack emission tests</u>. All particulate and PM_{10} tests shall be performed at maximum operating rate (90% to 110% of boiler heat input design capacity).

(iii) <u>Adjustments</u>. Only regular operating staff may adjust the emission control device settings or related process or operational parameters immediately prior to or during the test. Any such adjustments that are a result of consultation during the tests with testing personnel, equipment vendors, or consultants, may result in a determination by EPA that the test is invalid.

- (iv) <u>Data to be collected</u>. During each test run, data shall be collected on all parameters necessary to document how emissions were measured or calculated (such as test run length, minimum sample volume, volumetric flow rate, pollutant concentration, moisture and diluent corrections).
- (v) <u>Number of test runs</u>. Each test shall consist of at least three (3) valid test runs. Emission results shall be reported as the arithmetic average of all

valid test runs and shall be in terms of the permit emission limit.

- (vi) <u>Test report</u>. A test report shall be submitted to the EPA Regional Office within 60 days after completing the annual particulate/ PM_{10} tests.
- (b) Sulfur dioxide and nitrogen oxide. For purposes of reporting on compliance with the rolling 30-day and rolling 12-month SO_2 emission limitations in section II.A.5.(b) of this permit, and for reporting on compliance with the rolling 30-day NO_x emission limitation in section II.A.5.(c) of this permit, the permittee shall follow the reporting requirements of 40 CFR 60.7 and the additional reporting requirements of 40 CFR 60.51Da.
- 8. <u>Federal Phase II Acid Rain Program</u>. [40 CFR Parts 72 through 78]

[Explanatory note: Applicable requirements from 40 CFR 71.6(a)(4) pertaining to acid rain program may be found in section III.H of this permit.]

Bonanza Unit 1-1 is an affected unit under the Acid Rain Program, as defined in 40 CFR 72.2 and 72.6. This section II.A.7 incorporates applicable Acid Rain Program provisions from 40 CFR Parts 72 through 78.

- (a) <u>Permitting</u>. [40 CFR Part 72]
 - (i) The designated representative for Bonanza Unit 1-1 shall:
 - (A) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR Part 72, in accordance with the applicable deadlines specified in 40 CFR 72.30 (for Acid Rain permit renewal, the deadline is 6 months prior to expiration of the existing Acid Rain permit); and

[40 CFR 72.9(a)(1)(i) and 72.30(c)]

(B) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit. [40 CFR 72.9(a)(1)(iii)]

[Explanatory note: EPA issued an initial Acid Rain permit for Bonanza plant on December 29, 1997. The permit expired on December 31, 2002. The permittee submitted an Acid Rain application for renewal on January 29, 2002 Under 40 CFR 72.30(c), the renewal application was timely because it was submitted at least six months prior to expiration of the existing Acid Rain permit. Although EPA did not officially notify Deseret of application completeness, EPA nevertheless found the renewal application to be complete in accordance with 40 CFR 72.31. Under 40 CFR 72.32(a), once a designated representative submits a timely and complete Acid Rain permit application, the owners and operators of the affected source and the affected units covered by the permit application shall be deemed in compliance with the requirement to have an Acid Rain permit under §72.9(a)(2) and §72.30(a), unless the designated representative fails to submit timely and complete supplemental information as may be required by the permitting authority. Under the definition of "Acid Rain permit" in 40 CFR 72.2, issuance of this Part 71 operating permit with all applicable Acid Rain Program provisions constitutes renewal of the Acid Rain permit.]

- (ii) The owners and operators of Bonanza Unit 1-1 shall:
 - (A) Operate the Unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (B) Have an Acid Rain permit.

[40 CFR 72.9(a)(2)]

(b) <u>Monitoring</u>. [40 CFR Parts 72, 73 and 75]

(i) The owners and operators and, to the extent applicable, the designated representative for Bonanza Unit 1-1, shall comply with the monitoring requirements as provided in 40 CFR Part 75.

[40 CFR 72.9(b)(1)]

- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by Bonanza Unit 1-1 with the Acid Rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the Acid Rain Program.
 [40 CFR 72.9(b)(2)]
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at Bonanza Unit 1-1 under other applicable requirements of the Clean Air Act and other provisions of this Part 71 operating permit for the Bonanza plant.

[40 CFR 72.9(b)(3)]

- (c) <u>Sulfur dioxide</u>. [40 CFR Parts 72 and 73]
 - (i) The Acid Rain Program Phase II allowance allocation for Bonanza Unit

1-1, as listed in Table 2 of 40 CFR 73.10, is:

- (A) 10,782 tons for each of calendar years 2000 through 2009; and
- (B) 8,818 tons for years 2010 and beyond.
- (ii) The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the EPA in Table 2 of §73.10. Under 40 CFR §72.84, changes in a unit account do not necessitate a revision to the unit's SO₂ allowance allocations identified in this permit.

[40 CFR 73.10 and 72.84]

- (iii) The owners and operators of Bonanza Unit 1-1 shall:
 - (A) Hold allowances in the SO₂ compliance subaccount for Bonanza Unit 1-1, as of the allowance transfer deadline defined in 40 CFR 72.2 (after deductions under 40 CFR 73.34(c)) no less than the total annual SO₂ emissions for the previous calendar year from Unit 1-1; and
 - (B) Comply with the applicable Acid Rain emissions limitation for SO_2 .

[40 CFR 72.9(c)(1)]

(iv) Each ton of SO₂ emitted in excess of the Acid Rain emissions limitations for SO₂ shall constitute a separate violation of the Clean Air Act.

[40 CFR 72.9(c)(2)]

(v) Starting January 1, 2000, Bonanza Unit 1-1 is subject to the requirements of 40 CFR 72.9(c)(1), Sulfur Dioxide Requirements.

[40 CFR 72.9(c)(3)(iii)]

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

[40 CFR 72.9(c)(4)]

(vii) An allowance shall not be deducted in order to comply with the requirements of 40 CFR 72.9(c)(1)(i) prior to the calendar year for which the allowance was allocated.

[40 CFR 72.9(c)(5)]

(viii) An allowance allocated by the EPA Administrator under the Acid Rain Program is a limited authorization to emit SO_2 in accordance with the Program. No provision of the Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 and 72.8, and no provision of law, shall be construed to limit the authority of the United States to terminate or limit such authorization.

[40 CFR 72.9(c)(6)]

(ix) An allowance allocated by the EPA Administrator under the Acid Rain Program does not constitute a property right.

[40 CFR 72.9(c)(7)]

- (d) <u>Nitrogen oxide</u>. [40 CFR Parts 72 and 76]
 - (i) The owners and operators of Bonanza Unit 1-1 shall comply with the applicable Acid Rain emissions limitation for NO_x . The applicable Phase II NO_x emission limitation for dry bottom wall fired boilers is 0.46 lb/MMBtu on an annual average basis, beginning on January 1, 2008. [40 CFR 72.9(d) and 76.7(a)(2)]

[Explanatory note: The initial Acid Rain permit issued for Bonanza plant on December 29, 1997, specified a NO_x early election emission limit of 0.50 lb/MMBtu. Under 40 CFR 76.8(a)(2), the early election limit expired on January 1, 2008 and the NO_x emission limit reverted to the applicable standard Phase II NO_x limit, which is 0.46 lb/MMBtu for Bonanza plant.]

- (e) Excess emissions. [40 CFR Parts 72 and 77]
 - (i) The designated representative of Bonanza Unit 1-1 that has excess emissions in any calendar year shall submit a proposed offset plan, as required by 40 CFR Part 77.

[40 CFR 72.9(e)(1)]

- (ii) The owners and operators of Bonanza Unit 1-1 that has excess emissions in any calendar year shall:
 - (A) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
 - (*B*) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

[40 CFR 72.9(e)(2)]

- (f) <u>Recordkeeping and reporting</u>. [40 CFR Parts 72, 73 and 75]
 - (i) Unless otherwise provided, the owners and operators of Bonanza Unit 1-1 shall keep on site at Bonanza plant each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator.
 - (A) The certificate of representation for the designated representative for Bonanza Unit 1-1 and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; *provided* that the certificate and documents shall be retained on site at Bonanza plant beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (*B*) All emissions monitoring information, in accordance with 40 CFR Part 75, *provided* that to the extent that Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (C) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program.
 - (D) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

[40 CFR 72.9(f)(1)]

 (ii) The designated representative for Bonanza Unit 1-1 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under Subpart I of 40 CFR Part 72, and 40 CFR Part 75.

[40 CFR 72.9(f)(2)]

- (g) <u>Liability</u>. [40 CFR Parts 72 through 78]
 - (i) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

[40 CFR 72.9(g)(2)]

(iii) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

[40 CFR 72.9(g)(3)]

(iv) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

[40 CFR 72.9(g)(4)]

(v) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

[40 CFR 72.9(g)(5)]

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

[40 CFR 72.9(g)(6)]

(vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

[40 CFR 72.9(g)(7)]

(h) <u>Effect on other authorities</u>. [40 CFR Parts 72 and 73]

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (ii) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (iii) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (v) Interfering with, or impairing, any program for competitive bidding for power supply in a State in which such program is established.

[40 CFR 72.9(h)]

B. Fugitive Emission Sources

The requirements in this section II.B pertain to sources of emissions at Bonanza plant other than point sources (main boiler, auxiliary boiler, emergency diesel generator, emergency diesel fire pump, and construction heaters).

- 1. <u>Requirements from Federal PSD Permit Issued February 2, 2001</u>.
 - (a) The permittee shall enclose the coal and limestone conveyors and all drop points shall be vented to fabric filter dust collectors.

[Explanatory note: A list of the conveyors and the fabric filter dust collectors is in Table 3 of this permit.]

(b) The permittee shall ensure that the track hopper for bottom dump coal shall have

water sprays in place. The water spray shall be used during dumping when conditions warrant. Conditions which warrant operation of the sprays are defined as any time the 20% opacity level is in jeopardy of being exceeded. To ensure that the sprays are always operative, the equipment shall be tested at least once per month, except when weather conditions prohibit. A log of testing and operation shall be kept. The log shall include:

- (i) Times of testing and results;
- (ii) Times of coal deliveries;
- (iii) Times of spray operation;
- (iv) Weather conditions at time of coal deliveries; and
- (v) Coal conditions (washed, unwashed, dry, moist, etc.).
- (c) The permittee's coal pile shall not exceed 22 acres in total area. The active reclaim area shall not exceed 11 acres at any one time. The reclaim area may be moved to any location on the coal pile. The remainder of the coal pile shall be the long-term storage area. Emissions of particulate from the long-term storage area shall be controlled by compaction of the coal pile surface and sealing with a surfactant initially and by subsequent application of sealing agent as warranted. A surfactant and spray mechanism to apply it shall be available and operative at all times. Conditions which warrant application of the surfactant are defined as any time the 20% opacity level might be exceeded. A log of operation shall be kept. The log shall include:
 - (i) Times of spray operation;
 - (ii) Compaction operation;
 - (iii) Weather conditions; and
 - (iv) Surface conditions (dry, crumbled, moist, etc.).
- (d) The permittee's limestone storage shall be sealed with a surfactant as dry conditions warrant or as determined necessary by the EPA Region 8 Office.
- (e) The permittee shall manage the fly ash/FGD sludge mixture at the end of the conveyor and prior to being completely covered in accordance with landfill procedures. The permittee shall add sprayed water to minimize fugitive emissions as conditions warrant, in accordance with the facility's Fugitive Emissions Dust Control Plan. *[Explanatory note: The Fugitive Emissions Dust Control Plan appears as Attachment 2 to this permit.]*
- (f) The permittee shall maintain a record/log of stabilization work done which includes dates, type of stabilizing agent, amount applied, and area of application.
- (g) The permittee shall water spray and/or chemically treat all unpaved roads and other

unpaved operational areas that are used by mobile equipment to control fugitive dust. The application of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. The opacity shall not exceed 20% during all times the areas are in use or the outside temperature is below freezing. If chemical treatment is to be used, the plan shall be approved by the EPA Region 8 Office. The permittee shall maintain records of water treatment for all periods when the plant is in operation. The records shall include the following items:

- (i) Date;
- (ii) Number of treatments made, dilution ratio, and quantity;
- (iii) Rainfall received, if any, and approximate amount; and
- (iv) Time of day treatments were made.

Records of treatment shall be made available to the EPA Region 8 Office upon request and shall include a period of two years ending with the date of the request.

- (h) The permittee shall control visible emissions from haul-road traffic and mobile equipment in operational areas by implementing procedures in its Fugitive Emissions Dust Control Plan.
- (i) The permittee shall develop a Fugitive Emissions Dust Control Plan and provide the EPA Region 8 Office with a copy of this Plan by 90 days after the effective date of the EPA PSD permit issued on February 2, 2001. The Plan shall address all applicable conditions in this permit. The permittee shall review this Plan annually, by the anniversary date of this Permit, and, if necessary, update or change the Plan to ensure that fugitive emissions are minimized from the facility. The permittee shall provide the EPA Region 8 Office with the most current copy of the Fugitive Emissions Dust Control Plan within 90 days after revisions are made to it.

[Explanatory note: The latest Plan update was submitted to EPA on January 27, 2014 and appears as Attachment 2 of this permit.]

2. <u>Requirements from 40 CFR Part 60, Subpart Y: Standards of Performance for Coal</u> <u>Preparation Plants.</u>

(a) The provisions of Subpart Y apply to coal preparation plants commencing construction or modification after October 24, 1974 and processing more than 200 tons per day of coal. "Coal preparation plant" is defined in Subpart Y as any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying. Affected facilities at coal preparation plants include the following equipment at Bonanza plant: coal processing and conveying equipment (including breakers and crushers) and coal storage systems. "Coal storage system," as defined in Subpart Y, excludes open storage piles.

[40 CFR 60.250 & 60.251]

- (b) The following provision of Subpart Y applies to Bonanza plant: On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the permittee shall not cause to be discharged into the atmosphere gases which exhibit 20 percent opacity or greater, from any coal processing and conveying equipment (including breakers and crushers) and coal storage. Opacity shall be determined by Method 9 and the procedures in 40 CFR 60.11.
 [40 CFR 60.252(c) & 60.254(b)(2)]
- (c) Method 9 observations shall be conducted no less frequently than monthly. Dates and locations where observations were conducted, as well as the opacities that were recorded, shall be identified in the semi-annual monitoring reports required by this permit.

[40 CFR 71.6(c)(1)]

[Explanatory note: There is no wet or dry cleaning or thermal drying of coal at Bonanza plant. Also, there is no equipment at Bonanza plant meeting the definition of "coal transfer and loading system" in Subpart Y, since no coal is shipped from the plant.]

III. Facility-Wide or Generic Permit Requirements

Conditions in section III of this permit apply to all emissions units located at the facility, including any units not specifically listed in Tables 2 and 3 of section I.B.

- **A.** Air Pollution Control Equipment Operation and Operator Training [40 CFR 52.21 and Federal PSD permit dated February 2, 2001]
 - 1. In addition to the requirements of 40 CFR 60.11(d), the permittee shall adequately and properly maintain all installations and facilities covered by this permit. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices, such as electronic monitoring displays, pressure gauges, amperes and voltage measurements, flow rate indicators, temperature gauges, CEMs, etc., shall be installed and operated properly and be easily accessible to compliance inspectors.
 - 2. A copy of all manufacturers' operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees and personnel who operate the equipment and shall be made available to compliance inspectors upon their request.
 - 3. The permittee may have written dated guidance available to ensure the proper operation and maintenance of pollution control equipment that supplements or complements

manufacturer's instructions. This guidance may be prepared based on the permittee's experience with operating pollution control equipment. The guidance shall be available to all employees and personnel who operate the equipment and shall be made available to compliance inspectors upon their request.

4. The permittee shall provide adequate training, and periodic re-training, to all employees or personnel who operate air pollution control equipment. Records of operator training shall be made available to EPA upon verbal or written request. The EPA PSD permit dated February 2, 2001, shall be made available by the permittee to all employees or personnel who operate the equipment covered by the PSD permit.

B. Recordkeeping Requirements [40 CFR 71.6(a)(3)(ii) and 63.10(b)(3)]

In addition to the unit-specific recordkeeping requirements in section II of this permit, the permittee shall comply with the following generally applicable recordkeeping requirements of 40 CFR Parts 63 and 71:

- 1. <u>Types of records</u>. The permittee shall keep records of required monitoring information that include the following:
 - (a) The date, place, 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;
 - (e) The results of such analyses; and
 - (f) The operating conditions as existing at the time of sampling or measurement.
- 2. <u>Records retention</u>. The permittee shall retain records of all required monitoring data and support information 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, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

[40 CFR 71.6(a)(3)(ii)]

3. <u>Records of 40 CFR Part 63 non-applicability determinations</u>. If the permittee determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants is not subject to a relevant standard or other requirement established under 40 CFR Part 63, the permittee shall keep a record of the

non-applicability determination on site at the source for a period of five years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the non-applicability determination shall include an analysis (or other information) that demonstrates why the permittee believes the source is unaffected (e.g., because the source is an area source).

[40 CFR 63.10(b)(3)]

C. Reporting Requirements [40 CFR 71.6(a)(3)(iii)]

In addition to the unit-specific reporting requirements in section II of this permit, the permittee shall comply with the following generally applicable reporting requirements of 40 CFR Part 71:

1. <u>Semiannual monitoring reports</u>. The permittee shall submit all reports of any required monitoring under this permit at least every six months, by April 1 and October 1 of each year. The report due on April 1 shall cover the six-month period ending on the last day of February before the report is due. The report due on October 1 shall cover the six-month period ending on the last day of August before the report is due. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with condition IV.E.1 below.

[Explanatory note: To help Part 71 permittees meet reporting responsibilities, EPA has developed a form "SIXMON" for six-month monitoring reports. The form may be found on EPA website at: <u>http://www.epa.gov/air/oaqps/permits/p71forms.html</u>]

"Deviation" means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined by observation or through review of data obtained from any testing, monitoring, or recordkeeping established in accordance with §71.6(a)(3)(i) and (ii). For a situation lasting more than 24 hours which constitutes a deviation, each 24 hour period is considered a separate deviation. Included in the meaning of deviation are any of the following:

- (a) A situation where emissions exceed an emission limitation or standard;
- (b) A situation where process or emissions control device parameter values indicate that an emission limitation or standard has not been met;
- (c) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or
- (d) A situation in which an exceedance or an excursion, as defined in 40 CFR Part 64 occurs.
- 2. <u>Deviation reports</u>. The permittee shall promptly report to the EPA Regional Office any

deviations from permit requirements, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" is defined as follows:

- (a) Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or
- (b) Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:
 - (i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;
 - (ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours;
 - (iii) For all other deviations from permit requirements, the report shall be submitted with the semi-annual monitoring report required in paragraph III.C.1 above.
- (c) The permittee shall notify the EPA Regional Office of the occurrence of any deviations described by paragraphs III.C.2(b)(i) through (ii) above by telephone (800-227-8917), or by fax (303-312-6064), or by email to: r8airreportenforcement@epa.gov, based on the timetables listed above.
 [Notification by telephone, fax or email must specify that this notification is a deviation report for a Part 71 permit.] A written notice, certified consistent with the Submissions section (condition IV.E.1) of this permit, shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required under paragraph III.C.1 above.

[Explanatory note: To help Part 71 permittees meet reporting responsibilities, EPA has developed a form "PDR" for prompt deviation reporting. The form may be found on EPA website at: <u>http://www.epa.gov/air/oaqps/permits/p71forms.html</u>]

D. Compliance Schedule and Progress Reports [40 CFR 71.6(c)(3) and (4); 71.5(c)(8)(iii)]

For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements.

For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis.

[Explanatory note: EPA has made a preliminary determination that it needs to correct the currently applicable PSD requirements for the facility due to an error in the Federal PSD permit issued on February 2, 2001. Additional information regarding this PSD permitting error and EPA's plan to correct it can be found in the Statement of Basis accompanying this draft permit.]

1. <u>Request of Administrative Permit Amendment.</u> Within 60 days after EPA issues a final and effective Federal PSD permit correction for this facility, the permittee shall submit to EPA a request for an administrative permit amendment to revise the Part 71 permit to include the terms and conditions of the PSD permit correction. [Section IV.H of this permit; 40 CFR 71.7(d)]

E. Permit Shield [40 CFR 71.6(f)]

- 1. Nothing in this permit shall alter or affect the following:
 - (a) The liability of the permittee for any violation of applicable requirements, prior to or at the time of permit issuance;
 - (b) The applicable requirements of the Acid Rain Program, consistent with section 408(a) of the Clean Air Act;
 - (c) The ability of the EPA to obtain information under Section 114 of the Clean Air Act; or
 - (d) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the Administrator under that section.
- 2. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that:
 - (a) Such requirements are included and are specifically identified in the permit; or
 - (b) Those requirements not applicable to the source are specifically identified and listed in the permit, including the determination of non-applicability or a concise summary thereof.
- **F.** Emissions Trading and Operational Flexibility [40 CFR 71.6(a)(13)(i) through (iii), 71.6(a)(8) and 71.6(a)(10)]
 - 1. The permittee is allowed to make a limited class of changes under Section 502(b)(10) of

the Clean Air Act within this permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions) and are not Title I modifications. This class of changes does not include:

- (a) Changes that would violate applicable requirements; or
- (b) Changes that would contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[40 CFR 71.6(a)(13)(i)]

2. The permittee is required to send a notice to EPA at least 7 days in advance of any change made under this provision. The notice shall describe the change, when it will occur, any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit.

[40 CFR 71.6(a)(13)(i)(A)]

3. Any permit shield provided in this permit does not apply to changes made under this provision.

[40 CFR 71.6(a)(13)(i)(B)]

4. 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 in this permit.

[40 CFR 71.6(a)(8)]

G. Stratospheric Ozone and Climate Protection [40 CFR Part 82]

- Subpart F Recycling and Emissions Reduction. The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Part 82, Subpart B. The requirements below apply to any air conditioning appliances at Bonanza plant ("appliance" as defined in 40 CFR 82.152) that contain Class I or Class II refrigerants, in an amount less than 50 pounds:
 - (a) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the applicable required practices pursuant to 40 CFR 82.156;
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the applicable standards for recycling and recovery equipment pursuant to 40 CFR 82.158;

- Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161; and.
- (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined in 40 CFR 82.152) shall comply with recordkeeping requirements pursuant to 40 CFR 82.166(i). ("MVAC-like appliance" as defined at 40 CFR 82.152)
- 2. <u>Subpart H Halon Emissions Reduction</u>. The permittee shall comply with the following requirements from 40 CFR Part 82, Subpart F, applicable to any fire protection equipment at Bonanza plant containing Halon 1211, 1301, 2402, any isomers of these chemicals, or any blend of these chemicals:
 - (a) Persons testing, maintaining, servicing, repairing, or disposing of halon-containing equipment or using such equipment for technician training must comply with the requirements of 40 CFR 82.270(b);

[40 CFR 82.270(b)]

 Organizations that employ technicians who test, maintain, service, repair or dispose of halon-containing equipment must comply with the requirements of 40 CFR 82.270(c); and

[40 CFR 82.270(c)]

(c) Persons who dispose of halon-containing equipment must comply with the requirements of 40 CFR 82.270(d).

[40 CFR 82.270(d)]

H. Acid Rain Program Requirements from Part 71 [40 CFR 71.6(a)(4) and 71.7(e)]

1. Emissions exceeding any allowances that the source lawfully holds under 40 CFR Parts 72 through 78 are prohibited.

[40 CFR 71.6(a)(4)]

2. No permit revision shall be 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.

[40 CFR 71.6(a)(4)(i)]

3. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

[40 CFR 71.6(a)(4)(ii)]

4. Any allowances shall be accounted for according to the procedures established in regulations 40 CFR Parts 72 through 78.

[40 CFR 71.6(a)(4)(iii]

5. A permit modification for purposes of the Acid Rain portion (section II.A.7) of this permit shall be governed by 40 CFR Part 72.

[40 CFR 71.7(e)]

IV. <u>General Provisions</u>

A. Annual Fee Payment [40 CFR 71.9]

- 1. The permittee shall pay an annual permit fee in accordance with the procedures outlined below.
- 2. The permittee shall pay the annual permit fee each year no later than April 1st. The fee shall cover the previous calendar year.
- 3. The fee payment shall be in United States currency and shall be paid by money order, bank draft, certified check, corporate check, or electronic funds transfer payable to the order of the U.S. Environmental Protection Agency.
- 4. The permittee shall send fee payment and a completed fee filing form to:

For regular U.S. Postal Service mail

For non-U.S. Postal Service express mail (FedEx, Airborne, DHL, and UPS)

U.S. Environmental Protection Agency FOIA and Miscellaneous Payments Cincinnati Finance Center P.O. Box 979078 St. Louis, MO 63197-9000 U.S. Bank Government Lockbox 979078 U.S. EPA FOIA & Misc. Payments 1005 Convention Plaza SL-MO-C2-GL St. Louis, MO 63101

5. The permittee shall send an updated fee calculation worksheet form and a photocopy of each fee payment check (or other confirmation of actual fee paid) submitted annually by the same deadline as required for fee payment to the address listed in the Submissions section of this permit.

[Explanatory note: The fee filing form "FF" and the fee calculation worksheet form "FEE" may be found on EPA website at: http://www.epa.gov/air/oaqps/permits/p71forms.html]

6. Basis for calculating annual fee:

- (a) The annual emissions fee shall be calculated by multiplying the total tons of actual emissions of all "regulated pollutants (for fee calculation)" emitted from the source by the presumptive emissions fee (in dollars/ton) in effect at the time of calculation.
 - (i) "Actual emissions" means the actual rate of emissions in tpy of any regulated pollutant (for fee calculation) emitted from a Part 71 source over the preceding calendar year. Actual emissions shall be calculated using each emissions unit's actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year.
 - (ii) Actual emissions shall be computed using methods required by the permit for determining compliance, such as monitoring or source testing data.
 - (iii) If actual emissions cannot be determined using the compliance methods in the permit, the permittee shall use other federally recognized procedures.

[Explanatory note: The presumptive fee amount is revised each calendar year to account for inflation, and it is available from EPA prior to the start of each calendar year.]

- (b) The permittee shall exclude the following emissions from the calculation of fees:
 - (i) The amount of actual emissions of each regulated pollutant (for fee calculation) that the source emits in excess of 4,000 tons per year;
 - (ii) Actual emissions of any regulated pollutant (for fee calculation) already included in the fee calculation; and
 - (iii) The quantity of actual emissions (for fee calculation) of insignificant activities [defined in \$71.5(c)(11)(i)] or of insignificant emissions levels from emissions units identified in the permittee's application pursuant to \$71.5(c)(11)(i).
- 7. Fee calculation worksheets shall be certified as to truth, accuracy, and completeness by a responsible official.

[*Explanatory note: The fee calculation worksheet form already incorporates a section to help you meet this responsibility.*]

8. The permittee shall retain fee calculation worksheets and other emissions-related data used to determine fee payment for 5 years following submittal of fee payment. Emission- related data include, for example, emissions-related forms provided by EPA and used by the

permittee for fee calculation purposes, emissions-related spreadsheets, and records of emissions monitoring data and related support information required to be kept in accordance with \$71.6(a)(3)(ii).

- 9. Failure of the permittee to pay fees in a timely manner shall subject the permittee to assessment of penalties and interest in accordance with §71.9(l).
- 10. When notified by EPA of underpayment of fees, the permittee shall remit full payment within 30 days of receipt of notification.
- 11. A permittee who thinks an EPA assessed fee is in error and who wishes to challenge such fee, shall provide a written explanation of the alleged error to EPA along with full payment of the EPA assessed fee.

B. Annual Emissions Inventory [40 CFR 71.9(h)(1)and (2)]

- 1. The permittee shall submit an annual emissions report of its actual emissions for both criteria pollutants and regulated HAPS for this facility for the preceding calendar year for fee assessment purposes. The annual emissions report shall be certified by a responsible official and shall be submitted each year to EPA by April 1st.
- 2. The annual emissions report shall be submitted to EPA at the address listed in the Submissions section of this permit.

[Explanatory note: An annual emissions report, required at the same time as the fee calculation worksheet by \$71.9(h), has been incorporated into the fee calculation worksheet form as a convenience.]

- **C. Compliance Requirements** [40 CFR 71.6(a)(6), Section 113(a) and 113(e)(1) of the Act, 40 CFR 51.212, 52.12, 52.33, 60.11(g), 61.12]
 - 1. <u>Compliance with the Permit</u>
 - (a) The permittee must comply with all conditions of this Part 71 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
 - (b) 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.
 - (c) For the purpose of submitting compliance certifications in accordance with \$71.6(c)(5), or establishing whether or not a person has violated or is in violation of

any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

2. <u>Compliance Certifications</u> [40 CFR 71.6(c)(5)]

The permittee shall submit to EPA a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices annually by April 1st, and shall cover the same 12 month period as the two consecutive semi-annual monitoring reports.

[Explanatory note: To help Part 71 permittees meet reporting responsibilities, EPA has developed a reporting form for annual compliance certifications. The form may be found on EPA website at: <u>http://www.epa.gov/air/oaqps/permits/p71forms.html</u>]

The compliance certification shall be certified as to truth, accuracy, and completeness by a responsible official consistent with §71.5(d).

- (a) The certification shall include the following:
 - (i) Identification of each permit term or condition that is the basis of the certification;
 - (ii) The identification of the method(s) or other means used for determining the compliance status of each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
 - (iii) The status of compliance with each term and condition of the permit for the period covered by the certification based on the method or means designated in (ii) above. The certification shall identify each deviation and take it into account in the compliance certification;
 - (iv) Such other facts as the EPA may require to determine the compliance status of the source; and
 - (v) Whether compliance with each permit term was continuous or intermittent.

D. Duty to Provide and Supplement Information [40 CFR 71.6(a)(6)(v), 71.5(a)(3), and 71.5(b)]

- 1. The permittee shall furnish to EPA, within a reasonable time, any information that EPA 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 EPA copies of records that are required to be kept pursuant to the terms of the permit, including information claimed to be confidential. Information claimed to be confidential must be accompanied by a claim of confidentiality according to the provisions of 40 CFR Part 2, Subpart B.
- 2. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. In addition, a permittee shall provide additional information as necessary to address any requirements that become applicable after the date a complete application is filed, but prior to release of a draft permit.

E. Submissions [40 CFR 71.5(d), 71.6(c)(1) and 71.9(h)(2)]

1. Any document (application form, report, compliance certification, etc.) required to be submitted under this permit shall be certified by a responsible official as to truth, accuracy, and completeness. Such certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Explanatory note: EPA has developed a reporting form "CTAC" for certifying truth, accuracy and completeness of Part 71 submissions. The form may be found on EPA website at: <u>http://www.epa.gov/air/oaqps/permits/p71forms.html</u>]

2. All fee calculation worksheets and applications for renewals and permit modifications shall be submitted to:

Part 71 Permit Contact Air Program, 8P-AR U.S. Environmental Protection Agency, 1595 Wynkoop Street Denver, Colorado 80202

3. Except where otherwise specified, all reports, test data, monitoring data, notifications, and compliance certifications shall be submitted to:

Director Air and Toxics Technical Enforcement Program, 8ENF-AT U.S. Environmental Protection Agency, 1595 Wynkoop Street Denver, Colorado 80202

F. Severability Clause [40 CFR 71.6(a)(5)]

The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.

G. Permit Actions [40 CFR 71.6(a)(6)(iii)]

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.

H. Administrative Permit Amendments [40 CFR 71.7(d)]

- 1. The permittee may request the use of administrative permit amendment procedures for a permit revision that:
 - (a) Corrects typographical errors;
 - (b) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - (c) Requires more frequent monitoring or reporting by the permittee;
 - (d) Allows for a change in ownership or operational control of a source where the EPA determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the EPA;
 - (e) Incorporates into the Part 71 permit the requirements from preconstruction review permits authorized under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of §§71.7 and 71.8 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in §71.6; or
 - (f) Incorporates any other type of change which EPA has determined to be similar to those listed above in (a) through (e) above.

[Note to permittee: If (a) through (e) above do not apply, please contact EPA for a

determination of similarity prior to submitting your request for an administrative permit amendment under this provision.]

I. Minor Permit Modifications [40 CFR 71.7(e)(1)]

- 1. The permittee may request the use of minor permit modification procedures only for those modifications that:
 - (a) Do not violate any applicable requirement;
 - (b) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
 - (c) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
 - (d) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - (i) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I; and
 - (ii) An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act;
 - (e) Are not modifications under any provision of Title I of the Clean Air Act; and
 - (f) Are not required to be processed as a significant modification.
- 2. Notwithstanding the list of changes ineligible for minor permit modification procedures in (a) above, minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by EPA.
- 3. An application requesting the use of minor permit modification procedures shall meet the requirements of §71.5(c) and shall include the following:
 - (a) A description of the change, the emissions resulting from the change, and any new

applicable requirements that will apply if the change occurs;

- (b) The permittee's suggested draft permit;
- (c) Certification by a responsible official, consistent with §71.5(d), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- (d) Completed forms for the permitting authority to use to notify affected States as required under §71.8.
- 4. The permittee may make the change proposed in its minor permit modification application immediately after it files such application. After the permittee makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions authorized by §71.7(e)(1)(iv)(A) through (C), the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.
- 5. The permit shield under §71.6(f) may not extend to minor permit modifications.

J. Significant Permit Modifications [40 CFR 71.7(e)(3), 71.8(d), and 71.5(a)(2)]

- 1. The permittee must request the use of significant permit modification procedures for those modifications that:
 - (a) Do not qualify as minor permit modifications or as administrative amendments;
 - (b) Are significant changes in existing monitoring permit terms or conditions; or
 - (c) Are relaxations of reporting or recordkeeping permit terms or conditions.
- 2. Nothing herein shall be construed to preclude the permittee from making changes consistent with Part 71 that would render existing permit compliance terms and conditions irrelevant.
- 3. Permittees must meet all requirements of Part 71 for applications, public participation, and review by affected states and tribes for significant permit modifications. For the application to be determined complete, the permittee must supply all information that is required by §71.5(c) for permit issuance and renewal, but only that information that is related to the proposed change.

K. Reopening for Cause [40 CFR 71.7(f)]

- 1. The permit may be reopened and revised prior to expiration under any of the following circumstances:
 - (a) Additional applicable requirements under the Act become applicable to a major Part 71 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to §71.7 (c)(3);
 - (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
 - (c) EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - (d) EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

L. **Property Rights** [40 CFR 71.6(a)(6)(iv)]

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

M. Inspection and Entry [40 CFR 71.6(c)(2)]

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow EPA or an authorized representative to perform the following:

- 1. Enter upon the permittee's premises where a Part 71 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

4. As authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

N. Emergency Provisions [40 CFR 71.6(g)]

- 1. In addition to any emergency or upset provision contained in any applicable requirement, the permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (a) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (b) The permitted facility was at the time being properly operated;
 - (c) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
 - (d) The permittee submitted notice of the emergency to EPA within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements for prompt notification of deviations.
- 2. In any enforcement proceeding the permittee attempting to establish the occurrence of an emergency has the burden of proof.
- 3. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

O. Transfer of Ownership or Operation [40 CFR 71.7(d)(1)(iv)]

A change in ownership or operational control of this facility may be treated as an administrative permit amendment if the EPA determines no other change in this permit is necessary and provided

that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to EPA.

P. Off Permit Changes [40 CFR 71.6(a)(12) and 40 CFR 71.6(a)(3)(ii)]

The permittee is allowed to make certain changes without a permit revision, provided that the following requirements are met, and that all records required by this section are kept for a period of 5 years:

- 1. Each change is not addressed or prohibited by this permit;
- 2. Each change shall meet with all applicable requirements and shall not violate any existing permit term or condition;
- 3. Changes under this provision may not include changes subject to any requirement of 40 CFR Parts 72 through 78 or modifications under any provision of Title I of the Clean Air Act;
- 4. The permittee must provide contemporaneous written notice to EPA of each change, except for changes that qualify as insignificant activities under §71.5(c)(11). The written notice must describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirements that would apply as a result of the change;
- 5. The permit shield does not apply to changes made under this provision;
- 6. The permittee must keep a record describing all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes;
- 7. The notice shall be kept on site and made available to EPA on request, in accordance with the general recordkeeping provision of this permit; and
- 8. Submittal of the written notice required above shall not constitute a waiver, exemption, or shield from applicability of any applicable standard or PSD permitting requirements under 40 CFR 52.21 that would be triggered by the replacement of any one engine, or by replacement of multiple engines.
- **Q.** Permit Expiration and Renewal [40 CFR 71.5(a)(1)(iii), 71.5(a)(2), 71.5(c)(5), 71.6(a)(11), 71.7(b), 71.7(c)(1), and 71.7(c)(3)]
 - 1. This permit shall expire upon the earlier occurrence of the following events:

- (a) Five years elapses from the date of issuance; or
- (b) The source is issued a Part 70 or Part 71 permit under an EPA approved or delegated permit program.
- 2. Expiration of this permit terminates the permittee's right to operate unless a timely and complete permit renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration of this permit.
- 3. If the permittee submits a timely and complete permit application for renewal, consistent with §71.5(a)(2), but EPA has failed to issue or deny the renewal permit, then all the terms and conditions of the permit, including any permit shield granted pursuant to §71.6(f) shall remain in effect until the renewal permit has been issued or denied.
- 4. The permittee's failure to have a Part 71 permit is not a violation of this part until EPA takes final action on the permit renewal application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit any additional information identified as being needed to process the application by the deadline specified in writing by EPA.
- 5. Renewal of this permit is subject to the same procedural requirements that apply to initial permit issuance, including those for public participation, affected State, and tribal review.
- 6. The application for renewal shall include the current permit number, description of permit revisions and off permit changes that occurred during the permit term, any applicable requirements that were promulgated and not incorporated into the permit during the permit term, and other information required by the application form.

[40 CFR 71.5(a)(2) and (c)(5)]

V. <u>Inspection Information</u>

A. Directions to Plant:

- 1. From Vernal, Utah, take Highway 40 south about 4 to 5 miles.
- 2. Turn right onto State Road 45, then go about 25 miles.
- 3. Turn at entrance sign for Bonanza plant.

Attachment 1: Bonanza Plant Process Description

<u>General plant description</u>: The Bonanza power plant is a 500-megawatt (estimated), coal-fired electrical generating facility. It consists of a dry bottom wall-fired Foster-Wheeler steam generator capable of producing over 3.2 million pounds of steam per hour. The turbine generator is a Westinghouse tandem compound two flow reheat unit.

Water for the unit is transported about 20 miles from the Green River near Jensen, Utah. Coal for the unit is mined in Colorado near Rangely, at the Cooperative's Deserado mine, and transported via an electric railroad 35 miles to the plant site. Occasionally, as needed, coal is also purchased on the open market and trucked to the site.

The project was originally developed for two generating units; however, due to the downturn of the petroleum industry in the late 1980's, the development of the second unit has been indefinitely postponed. Most of the power produced is transported to southern California, with the remainder supplying the Cooperative's members in Utah and surrounding states or sold on the open market.

<u>Fuel systems</u>: Bituminous low-sulfur coal is the primary fuel source for the plant. The coal comes into the plant by train from the Deserado coal mine. From the train the coal can be delivered to the outdoor coal storage pile or to the coal storage silo. From the storage silo the coal is conveyed to the crusher. Coal can also be reclaimed from the outdoor storage pile by conveying it to the crusher. Years ago the crusher was only used occasionally, but is now used routinely, as it helps the pulverizers run more smoothly.

Crushed coal is conveyed from the crusher to the bunkers just upstream of the pulverizers. There are five pulverizers. Each pulverizer has its own bunker. Stored coal is conveyed from the bunkers to the pulverizers. At the pulverizers the coal is pulverized to the consistency of talcum powder and fired into the boiler. The unit at full load burns about 250 tons of coal per hour and 6000 tons of coal every 24 hours. Full load heat input rate to the boiler is about 4578 MMBtu per hour, as reported to EPA in a March 7, 2000 electronic supplied spreadsheet. Low-NO_x burners are used in the boiler for NO_x emission control.

Fuel oil is used to start up the main boiler from a cold start, to change pulverizing equipment on line, and to operate the auxiliary boiler during shutdowns and for cold unit starts. Natural gas may be used for firing these boilers in the future as economics dictate. Fuel oil is also used to operate the plant's emergency diesel generator and emergency diesel fire pump. Fuel oil is stored in two 288,000 gallon tanks on site.

Diesel refueling is performed on site for heavy equipment via a 4,000 gallon underground storage tank. Propane is used to heat outlying coal handling buildings via construction heaters. The propane storage tank holds 30,000 gallons. A gasoline refueling station using a 4,000 gallon underground storage tank is also on the plant site for smaller vehicles.

<u>Turbine generator system</u>: The turbine generator uses steam at 1,005°F and 2,485 psi produced by the boiler to generate electricity. The turbine generator uses a lube oil system which includes a main reservoir, clean and dirty storage tanks, pumps and filters. The generating process involves converting mechanical energy to electrical energy supplying the plant site and for sales on the Western grid.

<u>Steam generator system</u>: Coal is pulverized and fed into the boilers via hot air streams to produce the steam needed for energy demands. Coal usage and steam production vary with energy needs. Fuel oil is used in the ignitors to support starting and stopping of the coal pulverizing equipment and for flame stabilization during transients. Fuel oil is also used for start-up steam production in a unit cold start. Auxiliary steam is produced by the package boiler for unit cold starts or supplemental heating during unit outages. The package boiler uses fuel oil and is rated at 150,000 pounds of steam an hour at 150 psi.

<u>Pollution control systems</u>: The power plant uses an Ecolaire baghouse for particulate control, a Combustion Engineering wet scrubber for SO_2 control, and low- NO_x burners for NO_x control.

<u>Baghouse</u>: The baghouse system for the main boiler is divided into two separate sections, each consisting of 12 compartments. The two sections (1-1 and 1-2) are on separate duct fan trains. Each compartment contains 450, 12-inch diameter, 37-foot long bags, for a total of 10,800 bags (both sections combined). Average pressure drop is 5.5 inches of water. The ducting allows for the use of any combination of compartments in a section at any time. Under normal circumstances, both sections of the baghouse are in use at the same time and all compartments are in use except during maintenance. Gas flow at full load through the baghouse and scrubber is approximately 1.16 million SCFM. The baghouse is designed to be 99.9% efficient.

The baghouse system is a reverse gas design using not only reverse gas but sonic horns for bag cleaning. Ash removal is accomplished by passing the boiler flue gas through the glass fabric bags where the ash is filtered by the fabric and trapped inside the bag. At a preset differential pressure, the compartment is removed from the gas stream and the bags are collapsed via a reverse gas stream. The collapsed bags release the trapped ash and it falls into a hopper below the compartment. From the hopper, the ash is transported to a silo where it is mixed with bottom ash and scrubber waste streams for landfill.

<u>Scrubber</u>: The SO₂ scrubber is a wet limestone system, built by Combustion Engineering. It consists of three identical countercurrent absorber modules, two of which are on line any time the plant is in service with the third module being a spare. Each absorber module uses three levels of counterflow limestone slurry sprays at 12,000 GPM to react with the flue gas. The spray is collected on a slotted tray which forces the gas through 1.5 inch diameter holes. This not only straightens the gas flow but provides a 100% contact between the gas and the slurry.

Limestone is ground on site in ball mills and mixed with water to a density of 35% to produce the needed slurry. The slurry is mixed into the absorber modules to maintain a module density of 13% and a pH of 5.7. The base and lower portion of each module tower is the slurry reaction tank. Each module also includes a bulk entrainment separator and mist eliminator vanes for water droplet removal. A mist eliminator cleaning system is used to clean the vanes. On occasion, scrubber enhancers such as adipic acid are added to the slurry as needed to aid in the removal process. The solids formed in the scrubbing process are removed by a sludge handling system, mixed with flyash and conveyed or trucked to an on-site landfill.

<u>Low-NOx burners</u>: The low-NO_x burners were installed by Foster-Wheeler during the initial design and construction of the boiler. In 1997, a new generation of low-NO_x burners designed by Advanced Burner Technologies was installed to help the boiler meet its Acid Rain Program Phase II early election emission

limit (0.50 lb/MMBtu). The low-NO_x burners work on the principle that a cooler flame combusts less of the nitrogen in the coal, therefore creating less NO_x emissions. The early election limit expired at the end of 2007 and cannot be renewed. The Acid Rain emission limit for NO_x has reverted to the standard Phase II limit of 0.46 lb/MMBtu, effective starting January 1, 2008.

<u>Emission monitoring equipment</u>: A Spectrum extractive dilution system continuously monitors the gaseous pollutants (SO₂ and NO_x) and diluent (CO₂) and flow rate from the 320-foot level of the stack, and monitors SO₂ at the inlet ducts to the scrubber. Gas samples are carried by heated sample lines to the 6^{th} floor of the scrubber where the analyzer and computer shelter is located. The data from the analyzers are sent to the data handling and acquisition system, where it is stored and used to generate reports to the EPA.

Inlet monitoring or coal analysis may be used to calculate inlet SO_2 in lb/MMBtu for removal calculation purposes. Coal sampling and analysis is done according to the applicable ASTM methods and 40 CFR 60 method 19 calculations.

Opacity is measured from the two ducts between the baghouses and the induced draft fans. The opacity monitors are located in the ductwork because the stack is a wet stack. Data from the two opacity monitors are averaged to report the stack opacity.

<u>Stack parameters</u>: The plant's main boiler stack is 604 feet high. It is constructed with a concrete shell and acid resistant brick liner. The exit diameter is 26 feet with an average exit temperature of about 120 degrees F. The stack flow rate at full load is estimated to be about 1.3 million SCFM with the new ruggedized rotor installed and operating.

The plant's auxiliary boiler stack is located in the Main Boiler building and extends through the roof. It is 240 feet high and has an exit diameter of 4.75 feet. The average exit temperature is 600 degrees F when the unit is in operation. The stack flow rate is about 1000 SCFM.

<u>Water supply system</u>: Water is transported approximately twenty miles from the Cooperative's wells along the Green River. The system discharges through a maximum 450 kilowatt hydro-generator into the Raw Water Storage pond on site prior to treatment. The system is capable of transporting at least 13,000 GPM.

Boiler feedwater must be extremely clean and demineralized prior to use. All treatment is performed on site. Two stages of cleaning occur, the first in the Water Treatment facility where boiler water goes through a reverse osmosis process. The second is in the turbine building where boiler water is then demineralized. The recirculation of the plant's condensate is also constantly polished to maintain strict compliance with boiler chemistry. Due to the remote location of the plant, the Cooperative also produces potable water on site.

The Bonanza power plant is a zero discharge facility. All waste water and storm water is collected and re-used where possible. All remaining water is sent to the evaporation ponds where it is impounded.

Attachment 2: Fugitive Emissions Dust Control Plan - Bonanza Plant

This plan as shown below was originally submitted by the permittee on April 23, 2001, and revised by the permittee on January 27, 2014, pursuant to a requirement of the Federal PSD permit issued on February 2, 2001, which appears as condition II.B.1.i of this operating permit. Condition II.B.1.i requires the permittee to review this plan annually, by the anniversary date of this permit, and, if necessary, update or change the plan to ensure that fugitive emissions are minimized from the facility. Submittal of any changes to the plan by the permittee may require revision of this Part 71 permit.

1. Purpose

The Bonanza Power Plant Unit 1 (Bonanza) lies in a remote desert location approximately 28 miles southeast of Vernal, Utah. Deseret Generation and Transmission Co-operative (Deseret) is the owner and operator of this unit. Deseret recognizes the importance of minimizing fugitive dust to protect the public health and welfare. Plant personnel and contractors are responsible for implementing, following, and documenting compliance with this Plan. All fugitive dust must not exceed 20% opacity, measured visually by Method 9.

The purpose of this plan is to establish operating procedures and work practices to minimize fugitive dust at Bonanza. The major sources of fugitive dust at Bonanza are addressed in this plan. Deseret believes this plan is feasible and economically reasonable to minimize fugitive dust.

2 Source Information

Deseret Generation and Transmission Co-operative Bonanza Power Plant Unit 1 12500 East 25500 South Vernal, Utah 84078 Phone: 435-789-9000

3. Process Description

Bonanza is an approximate 500 megawatt gross, coal fired electrical enerating unit (EGU). Coal is delivered to the site by train from Deseret's Deserado mine near Rangely, Colorado. On occasion, coal is purchased on the open market and delivered by truck. Coal is stored on a 22-acre (footprint) storage pile. The active reclaim area of this pile must not exceed 11 acres, but the reclaim area may be moved to any location on the pile. The other 11 acres will be considered in long term storage. The long term storage area will be compacted and sealed with a surfactant initially. Subsequent application of a sealing agent will be applied as needed. The coal storage pile is maintained by mobile equipment. All of the coal conveyors are covered to minimize fugitive dust.

Limestone is used in the SO_2 scrubber and is stored on site in a pile(s). It is conveyed into the scrubber by a covered conveyor. The limestone storage pile(s) is maintained by mobile equipment to minimize

fugitive dust.

The byproducts of the plant are fly ash, bottom ash, and scrubber sludge. Fly ash and scrubber sludge are mixed together and are transferred by a covered conveyor to the fly ash/sludge landfill. Occasionally, this product is trucked to the fly ash/sludge landfill during an equipment malfunction. The fly ash/sludge landfill is maintained by mobile equipment. The bottom ash is trucked to the bottom ash landfill and maintained by mobile equipment.

4. Major Sources of Potential Fugitive Dust

Major sources of potential fugitive dust at Bonanza due to wind erosion and/or mobile equipment motion are:

- a. Coal storage pile
- b. Limestone storage pile(s)
- c. Fly Ash/Sludge landfill
- d. Bottom ash landfill
- e. Unpaved roads

5. Work Practices

Safety considerations must be addressed when determining how best to go about minimizing fugitive dust. Furthermore, Deseret recognizes that there are periods of unusual weather events such as strong winds or periods of extreme cold when reasonable methods to control fugitive dust would not be successful. Under normal or typical circumstances, Table 1 shows the work practices that will be implemented to minimize fugitive dust. If a chemical treatment is going to be used, the plan must be approved by the EPA before application.

Sources	Level	Control Measure
Coal Pile	1	Apply water as a dust suppressant
	2	Compact material
	3	Minimize activity
	4	Apply a chemical dust suppressant, as needed
Limestone Pile(s)	1	Apply water as a dust suppressant
	2	Compact material
	3	Minimize activity
	4	Apply a chemical dust suppressant, as needed
Fly Ash/Sludge Landfill	1	Maintain product's moisture content
	2	Spray active areas with water cannons
	3	Spray active areas with the water truck
	4	Compact and cover with topsoil as soon as practicable
Bottom Ash Landfill	1	Apply water as a dust suppressant
	2	Compact material
	3	Minimize activity
	4	Apply a chemical dust suppressant, as needed
Unpaved Haul Roads	1	Apply water as a dust suppressant
	2	Compact material
	3	Minimize activity/reduce vehicle speed
	4	Apply a chemical dust suppressant, as needed
Unpaved Operational Areas	1	Apply water as a dust suppressant
	2	Compact material
	3	Minimize activity/reduce vehicle speed
	4	Apply a chemical dust suppressant, as needed

Table 1. Potential Sources & Control Measures

Potential

Control

Deseret personnel are responsible to ensure the appropriate level of control measures. The first level of control (1) descriges the minimum level of control for fugitive dust. The next levels (2 thru 4) describe control measures that are progressively more stringent. Control measures may be increased or decreased to reflect current conditions and activities.

6. Monitoring

Deseret will visually monitor potential sources for fugitive dust during daylight conditions if the 20% opacity level is in jeopardy of being exceeded. Control levels will be increased by one level or degree if the 20% opacity level is exceeded for a period of at least three (3) consecutive six-minute intervals. Thereafter, and continuing until the opacity level less than 20% is sustained for at least two (2) consecutive six-minute increments, the control level will increase by one level (up to control level 4) if opacity of at least 20% persists for a period of at least five (5) consecutive six-minute intervals after the previous control level increase. Meteorological conditions such as wind, humidity, temperature, etc. should be considered during visual monitoring. Deseret maintains a group of employees who are EPA Method 9 certified for measuring opacity visually. These employees are responsible for the continuous visual monitoring and for plan compliance at Bonanza.

7. Recordkeeping

Records will be maintained on site to demonstrate control measures are in compliance with this plan and the Prevention of Significant Deterioration (PSD) permit. The records will include the control level, general notes, location (if necessary), weather conditions, wind conditions, surface conditions, compacting material (yes/no), and if water was used as surfactant. When any kind of chemical treatment (stabilization work) is done, a record/log must be kept that includes the dates, type of agent applied, amount applied and area of application.

Bonanza will use these records to certify compliance with the fugitive dust control requirement in the PSD permit. Records are available upon request and will include a period of two (2) years ending with the date requested.

8. Quality Control

The coal unloading track hoppers will be inspected monthly to ensure the dust suppression system is operational. This inspection will be performed only during months with above freezing temperatures. A record will be kept of these inspections. Any work orders on the system will be completed in a timely manner.

Those employees who are EPA Method 9 certified will review this plan annually. They will also maintain a current certification.

Deseret will conduct an annual review (completed before February 2) of this plan and potential sources to maintain PSD permit compliance. If revisions are made to this plan, a revised copy will be submitted to the EPA within 90 days of the revision date.