

BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Title V Air Operating Permit
and Prevention of Significant Deterioration Permit
for Little Gypsy Unit 3
Solid Fuel Repowering Project
Montz, La.

Activity Nos.: PER20020006; PER20060003
Permit Nos: 2520-00009-V1; PSD-LA-720
LDEQ Agency Interest No.: 687

Issued to Entergy Louisiana, LLC
By the Louisiana Department of
Environmental Quality on November
30, 2007.

**PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT
TO THE TITLE V OPERATING AND PREVENTION OF SIGNIFICANT
DETERIORATION PERMITS ISSUED TO ENTERGY, LOUISIANA, LLC FOR THE
LITTLE GYPSY UNIT 3 SOLID FUEL REPOWERING PROJECT IN MONTZ, LA.**

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Respectfully submitted this 9th day of January,
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INTRODUCTION

Pursuant to section 505(b) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2) and 40 C.F.R. § 70.8(d), the Sierra Club, Louisiana Environmental Action Network, Gulf Restoration Network, Alliance for Affordable Energy, and Sal Giardina, Jr. (“Petitioners”) petition the Administrator of the U.S. Environmental Protection Agency to object to the Title V Air Operating/Major Modification Permit (no. 2520-00009-V1) and Prevention of Significant Deterioration Permit (no. PSD-LA-720) (collectively, “the Permits”) issued on November 30, 2007 by the Louisiana Department of Environmental Quality to Entergy Louisiana, LLC for Little Gypsy Unit 3 Solid Fuel Repowering Project in Montz, Louisiana. Petitioners ask the Administrator to object to the Permits because they fail to comply with the “applicable requirements” of the Clean Air Act including: Louisiana’s State Implementation Plan (“SIP”), New Source Review and Prevention of Significant Deterioration (“PSD”) permitting requirements, and sections 111, 112 of the Act. *See* 40 C.F.R. § 70.2 (defining “applicable requirement” as used in the Clean Air Act).

Specifically, the Permits violate the Clean Air Act and the “applicable requirements” because: 1. the sulfur dioxide SO₂ emission limits in the PSD Permit for the circulating fluidized bed (“CFB”) boilers do not reflect best available control technology (“BACT”); 2. the Title V Permit improperly allows blanket exemptions from emissions limits during periods of startups, shutdowns, and malfunctions (“SSM”); and 3. the PSD Permit emission limits are based on outdated modeling. Because the Permits fail to comply with applicable requirements of the Clean Air Act, the Administrator must object to the Permits. 42 U.S.C. § 7661d(b); 40 C.F.R. § 70.8(c)(1) (“The Administrator will object to the issuance of any permit determined by the Administrator not to be in compliance with applicable requirements or requirements of [the

CAA].”); 40 C.F.R. § 70.8(d); *N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2002).

LEGAL FRAMEWORK

“The Title V operating permits program is a vehicle for ensuring that existing air quality control requirements are appropriately applied to facility emission units in a single document....Such applicable requirements include the requirement to obtain preconstruction permits that comply with applicable new source review requirements.” *In re Monroe Elec. Generating Plant*, Petition No. 6-99-2 at 2 (EPA Adm’r 1999). Therefore the Administrator must look at whether an emission unit has gone through the proper New Source Review or PSD permitting process, complies with the Louisiana State Implementation Plan (“SIP”), and whether the Title V permit contains accurate “applicable requirements,” including best available control technology (“BACT”) limits. 40 C.F.R. § 70.2; *In re Chevron Prod. Co., Richmond, Cal.*, Petition No. IX-2004-08 at 11-12 n.13 (EPA Adm’r 2005). If the Administrator objects to the Permits, “the Administrator *shall modify, terminate, or revoke*” the Permits. 42 U.S.C. § 7661d(b)(3).

Best Available Control Technology

The CAA forbids the construction of, or modifications to, a major emitting facility unless the facility uses BACT. 42 U.S.C. § 7475(a)(4). The Louisiana SIP specifically requires that major modifications “shall apply best available control technology for each regulated NSR pollutant.” La. Admin. Code tit. 33, § III:509(J)(3).¹ At its core, BACT is an emissions limitation based on an “application of production processes or available methods, systems, and techniques.” La. Admin. Code tit. 33, § III:509(B); *In re Three Mountain Power, LLC*, 10

¹ Louisiana’s EPA approved state implementation plan for PSD is codified at La. Admin. Code tit. 33, § III:509. 40 C.F.R. § 52.986.

E.A.D. 39, 54 (E.A.B. 2001) (“BACT means an emission limitation rather than a particular control technology.”). The goal of a BACT analysis is to reach an emissions limit for each pollutant. The underlying technology or standard is the means to achieve the limits. Only if “the administrative authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible,” may the administrative authority allow a “design, equipment, work practice, operational standard, or combination thereof” to satisfy the BACT requirement instead. *Id.*

EPA’s draft *New Source Review Workshop Manual* (“NSR Manual”) explains the process for determining BACT using the top-down approach. (EPA, Oct. 1990). Although EPA’s NSR Manual is not a binding regulation, the Environmental Appeals Board considers the NSR Manual to be an accurate statement of EPA’s approach to PSD issues. *In re Newmont Nev. Energy Inv. L.L.C. TS Power Plant*, PSD Appeal No. 05-04, 2005 WL 3626598 (E.A.B. 2005). Indeed, the Ninth Circuit has considered the top down approach the expected way to determine BACT. *See Citizens for Clean Air v. EPA*, 959 F.2d 839, 845 (1992). Entergy used the top-down approach as a template for analyzing BACT for its permit application.

The top-down approach consists of five steps: 1. Identify all control technologies; 2. Eliminate technically infeasible options; 3. Rank remaining control technologies by control effectiveness; 4. Evaluate most effective controls and document results; and 5. Select BACT. *See In re Prairie State Generating Co.*, 13 E.A.D. [], PSD Appeal No. 05-05, slip op. at 14-18 (EAB Aug. 24, 2006 (summarizing and describing steps in the top-down BACT analysis); *NSR Manual* at B.6. The CAA only recognizes energy, environmental, and economic impacts as acceptable grounds for rejecting the most stringent technically feasible control alternative. 42 U.S.C. §

7479(3). These impacts are evaluated in Step 4 of the top-down analysis. If the applicant rejects the most stringent alternative, the burden is on the applicant to justify the rejection. *NSR Manual* at B.26-29.² The NSR Manual further clarifies the control alternative rejection process as involving “a demonstration that circumstances exist at the source which distinguish it from other sources where the control alternative may have been required previously, or that argue against the transfer of technology or application of new technology.” *Id.* at B.29.

PROCEDURAL FACTS

Entergy submitted a revised permit application on September 5, 2006, replacing its application submitted on August 22, 2002, for a Title V air operating permit and PSD permit for Little Gypsy Unit 3. LDEQ published draft Title V and PSD permits in early May 2007 and invited public comments on the proposed permits through June 18, 2007.³ During the public comment period, EPA Region 6 and U.S. Fish and Wildlife Service Branch of Air Quality submitted comments on the proposed permits to LDEQ.⁴ *See* U.S. F&WLS comments attached as Exh. A. LDEQ responded to EPA’s public comments on November 30, 2007. Also on November 30, 2007, LDEQ issued the final Title V and PSD permits to Entergy. Entergy’s application, EPA Region 6 and U.S. Fish and Wildlife’s comments submitted during the public

² “The applicant is responsible for presenting an evaluation of each impact along with appropriate supporting information....Step 4 validates the suitability of the top control option in the listing for selection as BACT, or provides clear justification why the top candidate is inappropriate as BACT....In the event that the top candidate is shown to be inappropriate, due to energy, environmental, or economic impacts, the rationale for this finding needs to be fully documented for the public record.” *Id.*

³ The proposed Title V and PSD permits and Entergy’s application materials are available on the LDEQ website at <http://www.deq.louisiana.gov/apps/pubNotice/show.asp?qPostID=3759&SearchText=gypsy&startDate=1/1/2005&endDate=12/10/2007&category=>. Entergy supplemented its application on 9-20-07 after the public comment period expired. This addendum, which is attached as Exh. B, changed the annual NOx emission rate for the project.

⁴ In addition, EPA Region 6 submitted supplemental comments to LDEQ on the proposed Title V and PSD permits on 10-12-07.

comment period, LDEQ's responses to those comments, and the Permits form the basis of this Petition.

This Petition is timely since Petitioners are filing it within 60 days following the end of EPA's 45-day review period as required by CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2). *Id.* EPA received LDEQ's proposed Title V and PSD permits on September 26, 2007. *See* <http://yosemite.epa.gov/r6/Apermit.nsf/AirLA?OpenView&Start=1&Count=4000&Expand=1#1>. EPA's 45-day comment period expired on November 10, 2007. The Administrator has 60 days to grant or deny this Petition after Petitioners file it. *Id.* "The Administrator shall issue an objection within [the 60-day] period if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of [the CAA]." 42 U.S.C. § 7661d(b)(2).

SPECIFIC OBJECTIONS

1. LDEQ's BACT Determination for Controlling SO₂ Emissions is Wrong.

The SO₂ emissions from the proposed project will be above PSD significance levels. PSD Permit, Briefing Sheet at 3. Therefore, LDEQ is required to review Entergy's permit application in accordance with PSD regulations and determine whether Entergy's selected emissions control technology for SO₂ qualifies as BACT. Entergy, which analyzed BACT using a "top down" approach, proposed a "circulating fluidized bed technology combined with limestone injection and a flue gas desulfurization scrubber" as BACT for the CFB boilers (EQT 11 and EQT 12), which are the sources of the SO₂ emissions. LDEQ accepted Entergy's BACT proposal and the SO₂ limit of 0.15 lb/MMBtu—a limit reflecting the worst-case sulfur concentration in the fuel source.⁵ PSD-LA-720, Specific Conditions, Max Allowable Emissions Rates for CFB Boilers.

⁵ PSD-LA-720, Specific Conditions, Max Allowable Emissions Rates for CFB Boilers. This permit also has an SO₂ emission rate for the boilers of 0.08 lb/MMBtu when burning "100% Powder River Basin, western bituminous, western subbituminous and international subbituminous coals, or any combination of these coals with less than 1.5 lb/MMBtu (higher heating value) inlet sulfur concentration."

The PSD permit also has an SO₂ emission rate for the boilers of 0.08 lb/MMBtu when burning “100% Powder River Basin (“PRB”), western bituminous, western subbituminous and international subbituminous coals, or any combination of these coals with less than 1.5 lb/MMBtu (higher heating value) inlet sulfur concentration.” *Id.*

The purpose of BACT is not to apply limits lenient enough to cover the worst case scenario. LDEQ is required to apply the most stringent controls unless Entergy demonstrates that it is not technologically feasible or cost effective, or that the control causes unique adverse energy or environmental collateral impacts. NSR Manual at B.24; *Newmont* at 16. Neither LDEQ nor Entergy demonstrates that the lower limits are not feasible for Little Gypsy Unit 3. Therefore, the Administrator must object to the PSD Permit because it contains deficient SO₂ limits for the CFB boilers.

- a. The SO₂ BACT limits of 0.15 lb/MMBtu for petroleum coke and 0.08 lb/MMBtu for PRB coal are not BACT.

There are at least three other CFB boiler permits that contain much lower SO₂ BACT limits. *See e.g.*, Entergy’s Title V/PSD Permit Application at 4-17. BACT is an emission limit based on the maximum degree of reduction that is achievable. Therefore, the SO₂ BACT limit of 0.15 lb/MMBtu for petroleum coke and 0.08 lb/MMBtu for PRB coal are not BACT because lower limits can be achieved at Little Gypsy. The lower SO₂ limits in other CFB permits, AES Puerto Rico, for example, can be achieved at Little Gypsy using either low sulfur fuel and a more efficient scrubber, up to 98% SO₂ control for PRB coal, or using petroleum coke and a more effective SO₂ scrubber, up to 99.9% SO₂ control. The record contains no demonstration that either 0.15 lb/MMBtu or 0.08 lb/MMBtu represent the maximum degree of SO₂ reduction that is achievable, and LDEQ fails to address this fact in its response to EPA Region 6 comments. *See* 11/30/07 LDEQ Ltr, Resp. to Cmmt. 1.

- b. LDEQ Does Not Provide an Adequate Explanation As To Why It Did Not Consider Lower Sulfur Coal and Petroleum Coke Appropriate for Achieving BACT.

“[I]n selecting BACT[, permitting authorities are required] to consider ‘application of production processes and available methods, systems, and techniques, including fuel cleaning, *clean fuels*, or treatment or innovative fuel combustion techniques.’” *In re Spurlock Generating Station*, Permit No. V-06-007, U.S. EPA Pet. No. IV-2006-4 (Aug. 30, 2007) at 37 (“*Spurlock Order*”) (quoting 42 U.S.C. § 7479(3)) (emphasis added). Permitting authorities “must provide a reason for rejecting a specific control technology as BACT based on the applicable criteria in the Clean Air Act and its relevant implementing regulations.” *Spurlock Order* at 30; *Indeck-Elwood, LLC*, 13 E.A.D. [], PSD Appeal No. 03-04, slip op. at 29 (Sept. 27, 2006). “A permit issuer must, therefore, articulate with reasonable clarity the reasons for its conclusions and must adequately document its decision making.” *Id.* Here, LDEQ failed to do this.

Indeed, EPA Region 6 specifically asked LDEQ to justify the 0.15 lb/MMBtu SO₂ as compared to the 0.129 lb/MMBtu SO₂ limit set for the CFB boilers at the Northampton Generating Station (PA DEP Permit No. 48-00021). EPA Region 6 Comments (6/15/07) ¶ 4. In response, LDEQ attributed the higher SO₂ limit in Entergy’s permit to Entergy’s fuel choice (primarily petroleum coke) which has higher sulfur content than the coal waste primarily used at the Northampton plant.⁶ This response is inadequate.

In addition, Entergy argued and LDEQ parroted that limiting the boilers’ ability to burn a variety of fuels to control SO₂ would defeat the purpose of the project, namely to make use of a readily available local fuel supply. The LDEQ cited as authority the *Prairie State* Environmental Appeal Board’s decision. 11/30/07 LDEQ Letter to EPA Region 6 at 3. However, the facility in *Prairie State* is a mine-mouth plant, tethered to an adjacent mine by conveyors. Little Gypsy is

⁶ LDEQ Public Comments Response Summary, Resp. to EPA Comment 4, attached to Title V Permit.

distinguishable as the CFB is not tethered to any particular source of fuel. The record here contains no evidence that there is a common ownership and control issue related to Little Gypsy fuel. Entergy can buy any fuel that allows it to comply with its permit limits, including cleaner petroleum coke and lower sulfur coals. Having offered no valid justification for its decision to eliminate clean fuels based on design, LDEQ must consider clean fuels in the BACT analysis, as plainly stated in the definition of BACT.

The EPA, in fact, remanded a Title V permit to the state agency to show that lower sulfur coal was not an achievable option to limit SO₂ from coal fired CFB boilers. *Spurlock* Order at 29 (granting petition to object in part based on permitting agency's failure to provide adequate explanation for determining that design basis fuel is BACT).⁷ The EPA said: "While permitting authorities have discretion in making the case-by-case technical assessments necessary to determine BACT for a specific source, in exercising that discretion, they must provide a reason for rejecting a specific control technology as BACT based on the applicable criteria in the Clean Air Act and its relevant implementing regulations. *Id.* at 30.

c. Requiring Low Sulfur Fuel Does Not Require a Change in Little Gypsy's Project Design or Purpose.

The amount of sulfur contained in the fuel dictates, to a degree, the amount of SO₂ that the fuel will emit when burned, as Entergy itself noted. Entergy Title V/PSD Permit Application at 4-24. Appropriately, Entergy identified the use of lower sulfur fuel as a control option in its BACT analysis. Entergy, then, summarily dismissed the lower sulfur fuel option from further BACT analysis asserting that limiting the CFB boilers' ability to burn a variety of fuels would

⁷ "In particular, EPA finds that KYDAQ and EKPC have failed to provide a complete justification for excluding low sulfur eastern bituminous coal as BACT for limiting SO₂ emissions from this project. Accordingly, the Administrator grants the petition on the narrow issue of the selection of SO₂ BACT, limits and directs KYDAQ and EKPC to provide a complete analysis to support the selection of the design coal as BACT." *Id.*

“defeat the purpose of this project.” *Id.* at 4-20. Entergy further said that it “is making use of a readily available local fuel supply (petroleum coke) as the primary fuel source” and wants the flexibility to “burn various types of coal as opportunities present themselves.” *Id.*

LDEQ supported Entergy’s conclusion stating “exclusive consideration of lower sulfur fuels as a control technology is not in accord with the project design.” LDEQ Resp. to EPA Region 6 Comments, Nov. 30, 2007 at 3. LDEQ asserted that Entergy’s conclusion is consistent with the Environmental Appeals Board’s decision in *Prairie State* where the EAB found *Prairie State* did not have to consider low-sulfur coal because that would necessarily mean receiving coal from a distant mine not co-located with the plant. *Prairie State* Opinion at 20-23. As discussed above, however, the situation in *Prairie State* is distinct and does not serve as precedent here. In *Prairie State*, the proposed facility is a “mine-mouth” plant co-located at a coal supply (also owned by *Prairie State*) which contains enough coal to supply the plant’s fuel needs—directly by conveyor belt from the mine—for 30 years. The EAB concluded that to “require evaluation of an alternative coal supply ... would constitute a fundamental change to the project.” *Prairie State* Opinion at 20-21. Alternative coal supplies would be “beyond the scope of the project, [which is] a power plant fueled from coal delivered by a conveyor belt from an adjacent dedicated mine.” *Id.* at 23.

Unlike *Prairie State*, Little Gypsy is not intrinsically tied to a specific and dedicated co-located fuel reserve that will fully power the plant for 30 years. Instead of a facility designed *for* a dedicated co-located fuel reserve as in *Prairie State*, Little Gypsy Unit 3’s design is just the opposite. Entergy designed the Little Gypsy project to burn fuel from a variety of sources. PSD Permit, Prelim. Determination Summary at 17-18. It is designed to accommodate fuels from just about anywhere. On October, 19, 2007, during the hearing before the Louisiana Public Service

Commission, Jeffery Heidingsfelder, Entergy's Director of Engineering and Construction-Fossil testified:

[P]etroleum coke has a lot of variability in the industry. We are in an excellent location to receive petroleum coke for various refineries up and down the Mississippi River and the intracostal waterway, as well as from overseas. We have a good location for overseas shipping of fuels into the site. So the variety opens up to the world, basically within the sulfur contents and other constituents in a range that we designed this facility to burn.⁸

Entergy's preference to use high sulfur petroleum coke from unidentified "local sources" does not dictate the project design. If a permittee's preference for high sulfur fuel—or for the flexibility to burn less-expensive fuel—were a valid exception to Congress' definition of BACT to include use of clean fuels, this exception would swallow the rule. In other words, LDEQ's deference to Entergy's choice of fuel unlawfully allows a preference for dirty fuels to trump CAA § 169(3)'s requirement that BACT take into account techniques that include use of "clean fuels." 42 U.S.C. § 7479(3).

Indeed, when reviewing the EAB's decision in *Prairie State*, the Seventh Circuit Court of Appeals said: "The Act is explicit that "clean fuels" is one of the control methods that EPA has to consider." *Sierra Club v. EPA*, 499 F.3d 653, 654 (7th Cir. 2007).⁹ The Seventh Circuit noted that *Prairie State* presents "a borderline case" as to where to draw the line between requiring available control technology and forcing a redesign of the proposed facility. Little Gypsy, on the other hand, is not "a borderline case." It would not be reasonable for EPA to defer to LDEQ's desire to allow Entergy's preference for an unspecified "local" (and comparatively

⁸ In re: Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility, LPSC Docket No. U-30192, 10-19-7, Cross Examination J. Heidingsfelder, 139; 140:1-5, excerpt attached as Exh. C.

⁹ The statutory definition of BACT, found in section 169 of the CAA, requires consideration of clean fuels. 42 U.S.C. § 7479(3) (defining best available control technology). "In deciding what constitutes BACT, the Agency must consider both the cleanliness of the fuel and the use of add-on pollution control devices." *In re: Inter-Power of N.Y.*, 5 E.A.B. 130, 134 (E.A.B. 1994).

dirty) fuel supply to determine BACT. Indeed, the U.S. Constitution's Commerce Clause policy against state restrictions on interstate commerce militates against EPA acceptance of a desire to discriminate against non-local fuel sources as a justification for relaxed emission standards. *Cf. Oregon Waste Systems, Inc. v. Department of Environmental Quality of State of Or.*, 511 U.S. 93, 98 (1994) (“[The Commerce] Clause has long been understood to have a ‘negative’ aspect that denies the States the power unjustifiably to discriminate against or burden the interstate flow of articles of commerce.”).

In short, Little Gypsy is a project designed to burn a variety of solid fuels from a variety of sources. In fact, Entergy chose the Little Gypsy site for its project in part because of “its accessibility to the sources of fuel ... from the Midwestern United States, Gulf Coast, and international suppliers via the Intracoastal Waterway and the Gulf of Mexico.” LDEQ Basis of Decision at 9. As such, Entergy is required to consider low sulfur petroleum coke and coal in this project. Given that the CFB boilers are designed to burn a wide variety of fuels and sulfur content as low as 0.5 %, ¹⁰ it would be inappropriate to eliminate sulfur coals and petroleum coke as technically infeasible in step 2 of the BACT analysis. Had Entergy completed its BACT analysis properly, it would have necessarily evaluated lower sulfur fuels with other pollution control devices and processes that are more protective than its chosen BACT limit.

Significantly, the five lowest SO₂ limits on Entergy's initial list of control alternatives called for use of a combination of some kind of technological control such as dry lime scrubbers, and a fuel

¹⁰ Entergy's Director of Engineering and Construction-Fossil testified that “CFB boilers represent a proven technology that can burn virtually any carbon-based solid fuel efficiently, including all grades of coal, high-ash waste coals, petroleum coke, and bio-mass. The CFB can also accommodate a broad range of sulfur contents, from 0.5 to 8%.” In re: Application of Entergy Louisiana, LLC for Approval to Repower Little Gypsy Unit 3 Electric Generating Facility, LPSC Docket No. U-30192, 7-11-7 Direct Test. of Jeffery Heidingsfelder, 11:3-6, excerpt attached as Exh. D.

restriction, such as coal with a maximum fuel sulfur content of 1%. Entergy's Title V/PSD Permit App. at 4-18.

- d. LDEQ's Cost Analysis Is Wrong: Corrected Analysis Shows Low Sulfur Coal is Cost Effective and LDEQ Cannot Eliminate it on Economic Grounds.

LDEQ further argues that even if lower sulfur fuels were considered as a potential BACT control technology, this option is not economically feasible. 11/30/07 LDEQ Ltr to EPA Region 6 at 3. Entergy calculated cost effectiveness in dollars per ton of SO₂ removed (“\$/ton”) using 2006 as-delivered fuel-cost data, adjusted for differences in the amount of limestone that would be required to control SO₂ emissions from each fuel. *Id.* at 4. LDEQ calculated the ratio of the difference in adjusted fuel costs in dollars per million Btus (“\$/MMBtu”) as such:

[Adjusted Fuel Cost for Fuel #1 – Adjusted Fuel Cost for Petroleum Coke] (1)

to the difference in outlet SO₂ emission rates in pounds per million Btus (“lb/MMBtu”)

[Outlet SO₂ Emissions for Petroleum Coke – Outlet SO₂ Emissions for Fuel #1] (2)

According to the LDEQ table, this ratio yields cost effectiveness in dollar per pound SO₂ removed. This value was then converted to dollars per ton by multiplying by 2000 pounds in a ton. A sample calculation of cost effectiveness for switching from petroleum coke to Powder River Basin coal using the Entergy method:

Cost effectiveness = [1.62 – 1.31]/[0.15-0.08] x 2000 = \$8,857/ton (3)

The results of calculations based on Equations (1) and (2) above are reported as “cost-effectiveness (\$/ton SO₂ removed)” in the first inset table on page 4 of LDEQ's 11/30/07 letter responding to EPA Region 6's comments. LDEQ then goes on to argue that these cost effectiveness values, ranging from \$8,855 to \$117,526/ton, are higher than costs being borne by other similar sources, based on SO₂ cost effectiveness values for other similar facilities. *Id.* at 4-5. This argument is not correct.

First, LDEQ claims that clean **fuels** are not cost effective. This requires that the **fuel** sulfur content be used to calculate cost effectiveness, not the controlled, outlet SO₂ as in the Entergy calculations. The denominator of the cost effectiveness calculation, Eq. (2) above, should be **fuel** sulfur content (called “Sulfur Loading” in the Entergy calculations) rather than “outlet SO₂ Emission Rate,” or

$$[\text{Sulfur Loading for Petroleum Coke} - \text{Sulfur Loading for Fuel \#1}](4)$$

Correcting this single fundamental error, the cost effectiveness of switching from petroleum coke to Powder River Basin coal, the example in Equation (4) above, is:

$$\text{Cost effectiveness} = [1.62 - 1.31]/[9.4 - 0.95] \times 2000 = \$73/\text{ton} (5)$$

Thus, when Entergy’s error is corrected, the cost effectiveness of switching from petroleum coke to Powder River Basin coal tumbles from \$8,857/ton to \$73/ton. Similarly, the cost effectiveness of switching from petroleum coke to Eastern Low Sulfur is \$255/ton; to Washed Warrior Run is \$438/ton; and to Raw Warrior Run is \$409/ton. All of these revised cost effectiveness values are less than the lower end of the range of costs borne by similar sources to control SO₂ (\$527/ton). Thus, fuel switching is cost effective and cannot be eliminated on economic grounds.

Second, the use of outlet SO₂ emission rates is further incorrect because it takes credit for scrubbing but does not reflect the relative costs of BACT scrubbing in the costs. For example, the cost to remove 98% of the SO₂ from petroleum coke would be much higher than the cost to remove 92% of the SO₂ from PRB coal, offsetting some of the economic benefit of using a high sulfur fuel when proper BACT controls are required. This relative cost difference is not considered in the cost calculations.

Third, the cost calculations adjust the delivered fuel cost for changes in the variable O&M (neglecting similar changes in capital costs as noted above), but base the adjustment solely on limestone. Limestone will be used in the fluidized bed and lime will be used in the spray dryer absorber selected to control SO₂ emissions from the boiler. Lime costs were apparently omitted. Lime costs considerably more than limestone. Thus, adjusted fuel costs of all of the alternate fuels would be lower than shown if lime costs were included and cost effectiveness values would be even lower than revised above.

Fourth, LDEQ compares the cost effectiveness of SO₂ control by fuel switching to costs for post combustion controls—various types of dry scrubbers and sorbent injection. 11/30/07 LDEQ Ltr at 4-5. This approach is like comparing apples to oranges. The NSR Manual explains that “where a *control technology* has been successfully applied to similar sources in a source category, an applicant should concentrate on documenting significant cost differences, if **any**, between the application of the *control technology* on those sources and the particular source under review.” NSR Manual, p. 31 (emphasis added). The comparison, then, must be on a “control technology” basis, not on a pollutant basis, as incorrectly proffered by LDEQ. Thus, to determine cost effectiveness of fuel switching, the applicant must compare the cost of fuel switching borne by other applicants with the cost of fuel switching in this instance, not with the cost of scrubbing and sorbent injection, which are separate SO₂ control technologies. The record contains no comparative cost data for fuel switching alone.

Finally, LDEQ fails to provide *any* analysis of the cost of using lower sulfur petroleum coke. The St. John River Power Park fuel analysis done for EPA in 2005 shows the highest concentration of SO₂ in petroleum coke available nationwide did not exceed 6.28 percent, with

an average sulfur content of 5.13 percent. Nowhere does LDEQ consider use of lower sulfur petroleum coke.

e. The PSD Permit Must Set Separate SO₂ Limits for Each Type of Fuel.

The LDEQ claims that “other permitting authorities have not been *required* to establish separate limits for each potential fuel.” 11/30/07 LDEQ Ltr to EPA Region 6 at 5. This is not true. The EPA has argued in comments across the United States that SO₂ BACT emission limits should be set to assure that the maximum degree of reduction in SO₂ is achieved across the range of fuels that may be burned. Setting limits for the lower (0.08 lb/MMBtu when burning PRB and 0.15 lb/MMBtu when burning petroleum coke) does not assure that the maximum degree of reduction is met when burning a lower sulfur petroleum coke or Warrior Run. A percent reduction must be included in the permit, or, in the alternative, separate SO₂ limits for each fuel.

BACT is an emission limit based on the maximum degree of reduction that is achievable....” La. Admin. Code tit. 33, pt. III, § 509.B. If a limit is set to only achieve the maximum degree of reduction for two fuels – petroleum coke with the highest amount of sulfur and Powder River Basin (“PRB”) coal with lowest sulfur, the facility could use a lower sulfur petroleum coke or PRB coal, or other coals with lower sulfur and operate their SO₂ controls at lower control efficiencies than established as BACT, thus contravening the definition of BACT. For example, the 0.15 lb/MMBtu SO₂ BACT limit is based on 98.7% SO₂ removal from 11.6 lb/MMBtu petroleum coke. 11/30/07 LDEQ Ltr to EPA Region 6 at 4, fn 2. If the facility switches from 11.6 lb/MMBtu petroleum coke to 5 lb/MMBtu petroleum coke, it could meet its SO₂ limit by only removing 94% of the SO₂. This is not the maximum degree of reduction set as BACT for the petroleum coke case. Thus, maximum degree of reduction is not met over the full range of likely fuels, contrary to the definition of BACT, which requires an emission limit based

on the maximum degree of reduction for the full range of operating conditions. NSR Manual, p. B.56.

EPA has provided comments to this effect on many other facilities across the U.S. These include permits issued for Springfield, MO (EPA pointed out that BACT cannot assume worst-case PRB coal, especially when such coal is not representative of the PRB coal being burned at power plants in the region);¹¹ Iatan, MO;¹² Longleaf, GA;¹³ Nebraska City Station¹⁴; Holcomb Units 2-4 in Kansas¹⁵ (BACT must assume a typical PRB coal-- not the worst case PRB coal); Hastings Nebraska;¹⁶ Roundup, Montana;¹⁷ and Comanche, Colorado,¹⁸ among others. Therefore, EPA has repeatedly made the same comment—BACT for SO₂ must assume a coal sulfur content and a control efficiency to assure the applicant achieves the maximum degree of reduction over the full range of fuels proposed. This can be accomplished in two ways, first by requiring a control efficiency in the permit and second by setting tiered SO₂ limits that address the full range of fuels.

Permits have been issued addressing these comments. The Longleaf PSD permit, issued by Georgia Department of Environmental Quality, required separate SO₂ limits for two separate

¹¹ Letter from JoAnn Heiman, Acting Chief, Air Permitting and Compliance Branch, U.S. EPA Region 7, to Leann Tippet Mosby, Staff Director, Missouri Department of Natural Resources, June 30, 2004.

¹² Letter from JoAnn Heiman, Chief, Air Permitting and Compliance, U.S. EPA Region 7, to Jim Kavanaugh, Director, Missouri Department of Natural Resources, December 5, 2005

¹³ Letter from Greg M. Worley, Chief, Air Permits Section, Heather Abrams, Chief, Air Protection Branch, Georgia Department of Environmental Protection Division, November 16, 2006.

¹⁴ Letter from JoAnn M. Heiman, U.S. EPA Region 7, to W. Clark Smith, Nebraska Department of Environmental Quality, Re: Nebraska City Station, January 26, 2005.

¹⁵ Letter from JoAnn M. Heiman, U.S. EPA Region 7, to Clark Duffy, Kansas Department of Health & Environment, Re: Holcomb Units 2-4, November 9, 2006.

¹⁶ Letter from JoAnn M. Heiman, Air Permitting and Compliance Branch, U.S. EPA Region 7, to W. Clark Smith, Nebraska Department of Environmental Quality, Re: Hastings, Nebraska, August 4, 2006.

¹⁷ E-mail from Hans Buening, U.S. EPA Region 8, to Sam Portanova, U.S. EPA Region 5, Re: Roundup, October 1, 2004.

¹⁸ Letter from Richard R. Long, U.S. EPA Region 8, to Douglas H. Benevento, Colorado Department of Public Health, May 12, 2005.

fuels, Powder River Basin and Central Appalachian coals, as requested by EPA Region 4. This permit further sets tiered SO₂ limits spanning the range of likely fuel sulfur contents. Elsewhere, the Newmont and White Pine PSD permits, both located in Nevada, contain separate fuel sulfur limits and SO₂ control efficiency to bound the range of likely fuel sulfur contents, and to assure that the facility achieves the maximum degree of reduction. Petitioners urge that separate BACT limits are required for the upper and lower end of the range of the probable future sulfur content.

2. **The Permits Unlawfully Exclude Startup, Shutdown, and Malfunction Periods from Emissions Limits.**

The Permits effectively create an illegal blanket exception to BACT requirements for periods of startup, shutdown, and malfunction. “BACT requirements cannot be waived or otherwise ignored during periods of startup and shutdown.” *In re Tallmadge Generating Station*, PSD Appeal No. 12-12, at 24 (E.A.B. 2003). PSD permits “may not contain blanket exemptions allowing emissions in excess of BACT limits during startup and shutdown.” *Id.* at 25. Setting a separate emissions limit during SSM periods requires an on-the-record determination “of the specific reasons for conclusion of infeasibility” of BACT limit compliance. *Id.* at 27. This discussion must include a description of “design, control, methodological, or other changes [that] are appropriate for inclusion in the permit to minimize the authorized excess emissions during startup and shutdown.” *Id.* PSD permits may impose separate emissions requirements during times of SSM, but they may not completely eliminate emissions requirements.

Specific Requirements 136,¹⁹ and 137²⁰ of the Title V Permit exclude times of SSM and emergency operating conditions from calculations that determine compliance with emissions

¹⁹ “Determine compliance with the SO₂ and NO_x emission standards by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler days, except for data obtained during startup, shutdown, malfunction (NO_x only), or emergency conditions (SO₂ only).”

standards. Specific Requirements 131²¹ and 130²² of the Title V permit allow noncompliance with federal particulate matter and NO_x standards during periods of SSM. Specific Requirement 184 establishes an opacity limit, “except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators.” The effect of excluding these conditions from the compliance calculations is to allow unlimited emissions of NO_x and particulate matter during SSM periods. Without additional limitations during periods of SSM, Specific Requirements 130, 131, 136, 137 and 184 constitute unlawful blanket exemptions to BACT requirements.

3. PSD Analysis Fails to Consider Effect of SO₂ Emissions on Breton National Wildlife Refuge.

The regulations state that the “owner or operator shall provide an analysis of the air quality impact projected for the area.” *Id.* § III:509(O)(2). No pollutant concentration may exceed the lesser of the primary and secondary national ambient air quality standards (“NAAQS”) for the period of exposure. *Id.* § III:509(D). Entergy used CALPUFF modeling to determine the impact of its SO₂ emissions on the Class I Breton National Wildlife Refuge, using assumed SO₂ emissions of 424.2 lb/hr for each of the boilers, or 848.4 lb/hr for both boilers. *Permit Application PSD Class I Modeling Analysis Report at 2-5.* However, the PSD Permit allows a maximum of 2279 lb/hr of SO₂ for each boiler during startup and shutdown conditions, allowing a total of 4558.24 lb/hr for both boilers during a startup or shutdown. PSD Permit, Specific Conditions, Max Allowable Emissions Rates. The maximum limit in the PSD Permit is

²⁰ “Determine compliance with particulate matter emission limitations by calculating the arithmetic average of all hourly emission rates for particulate matter each boiler operating day, except for data obtained during startup, shutdown, and malfunction.”

²¹ “Comply with the particulate matter emission standards under 40 CFR 60.42Da at all times except during periods of startup, shutdown, or malfunction.”

²² “Comply with the nitrogen oxides emission standards under 40 CFR 60.44Da at all times except during periods of startup, shutdown, or malfunction.”

over five times the amount Entergy modeled. Consequently, the maximum allowable emission rate of 2279.12 lb/hr for each boiler during SSM periods in the PSD permit is not representative of the emissions analyzed by Entergy for the Class I Brenton National Wildlife Refuge. This causes the Class I analysis used to support the PSD Permit to under represent the impacts to air quality at the Brenton Nation Wildlife Refuge. Therefore, for the maximum SO₂ limits in the PSD Permit are invalid. Entergy must be required evaluate the impact of 2279.12 lb/hr of SO₂ per boiler on the ambient air of the Brenton National Wildlife Refuge and show that the SO₂ concentration does not exceed the lesser of the primary and secondary NAAQS for the period of exposure. *Id.* § III:509(D).

Further, Louisiana regulations limit ambient air increases over baseline in Class I areas based on three hour, twenty-four hour, and annual measurements. La. Admin. Code tit. 33, § III:509(C). Specific Requirement 212 of the Title V Permit limits SO₂ emissions on the basis of a thirty-day rolling average, but fails to include limits based on a three-hour averaging time.

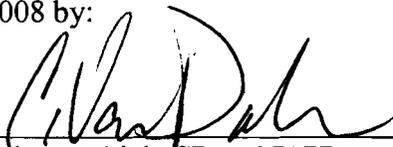
CONCLUSION

For the foregoing reasons, Petitioners ask that the Administrator object to the Title V Air Operating Permit Major Modification (permit no. 2520-00009-V1) and Prevention of Significant Deterioration Permit (PSD-LA-720) issued to Entergy by LDEQ.

Prepared by:

Emon Mahony, Law Student,
TULANE ENVIRONMENTAL
LAW CLINIC

Respectfully submitted this 9th day of January,
2008 by:



Adam Babich, SBN: 27177

Corinne Van Dalen, SBN: 21175

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Counsel for Sierra Club, Louisiana

Environmental Action Network, Gulf Restoration,

Alliance for Affordable Energy, and Sal

Giardina, Jr. Gulf Restoration, Alliance for

Affordable Energy, and Sal Giardina, Jr.

CERTIFICATE OF SERVICE

I hereby certify that I have this 9th day of January, 2008, served a copy of this Petition to those listed below.



Corinne Van Dalen

Stephen Johnson, Administrator (U.S. certified mail)

U.S. EPA Headquarters

Ariel Rios Bldg.

1200 Penn. Ave., NW

Mail Code 1101A

Washington, D.C. 20460

Mike D. McDaniel, Ph.D. (via U.S. certified mail)

Secretary

Louisiana Department of Environmental Quality

P.O. Box 4301

Baton Rouge, LA 70821-4301

Phone: (225)219-3953

Entergy Louisiana, LLC (via certified U.S. mail)

c/o Registered Agent T Michael Twomey

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Jefferson, LA 70121

Ms. Cherly S. Nolan
Administrator
LDEQ, Air Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313

Mr. Dustin Duhon
Environmental Chemical Specialist
LDEQ, Air Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313

Mr. Jeffery Robinson
Chief, Air Permits Section (6PD-R)
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Ms. Shannon Snyder
U.S. Environmental Protection Agency, Region 6
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Karen H. Freese, Senior Counsel
Entergy Services, Inc.
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Mail Unit L-ENT-26E
New Orleans, Louisiana 70113

Exhibit A

10893

original to JOA

copy to PC/Chosn

AF # 687 Per 2002-0006

A/MPG/GI/Duhon Per 2006-0003
Per 2006-0005

MAIN FILE



**FISH AND WILDLIFE SERVICE
AIR QUALITY BRANCH**

FACSIMILE COVER SHEET

Date: 6-17-07

Telephone: (303) 914-3803

Fax: (303) 969-5444

To: Dustin Duhon
(225) 219-3156 (fax)

From: Meredith Bond & Jill Webster

Subject: Little Gypsy Generating Plant
PSD permit PSD-LA-720
Agency Interest No. 687

Number of Pages (including this cover sheet): 9



United States Department of the Interior



FISH AND WILDLIFE SERVICE
National Wildlife Refuge System
Branch of Air Quality
7333 W. Jefferson Ave., Suite 375
Lakewood, CO 80235-2017

IN REPLY REFER TO:

FWS/ANWS-AR-AQ

MAIN FILE

June 18, 2007

Ms. Soumaya Ghosen
Public Participation Group
Louisiana Department of Environmental Quality
PO Box 4313
Baton Rouge, Louisiana 70821-4313

Subject: Entergy Louisiana LLC, Little Gypsy 3 Repowering Project – Comments Regarding Draft Prevention of Significant Deterioration (PSD) Permit PSD-LA-720 and Draft Title V Permit 2520-00009-IV2; Agency Interest #687

Dear Ms. Ghosen:

The US Fish and Wildlife Service (FWS) reviewed the Public Notice, and the proposed Title V and Prevention of Significant Deterioration (PSD) permits, regarding the proposed modifications for Little Gypsy Unit 3, located in Montz, St. Charles Parish, Louisiana. The facility is located approximately 160 km west of the Breton National Wildlife Refuge, a Class I area administered by the US Fish and Wildlife Service.

We have concerns regarding emission limits specified in the proposed PSD permit and are submitting this letter into the public record. In addition, we have general comments regarding representation of the annual emission rate changes identified in the Public Notice and supporting documentation for these permit actions.

Maximum Allowable Emission Rates- Proposed PSD Permit

On April 19, 2007, the FWS submitted a letter to the Louisiana Department of Environmental Quality regarding our concerns with the proposed Best Available Control Technology (BACT) limits and emissions averaging times specified by the applicant (see attached letter). We expressed our concerns about the inclusion of startup and shutdown emission limits which were not justified as BACT for the new units.

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The maximum allowable emission rates as expressed in the "Specific Conditions" section of the proposed PSD permit for each of the new Circulating Fluidized Bed boilers are listed in the second column of the following table. The data in the third and fourth columns appear in other documents associated with the draft permit package.

Pollutant	Emission Limits (each unit, per Specific Conditions section of draft permit)	Maximum Emission Rates (per Emission Inventory Questionnaire (EIQ))	Annual Emissions (per emissions summary table)
NO _x	0.07 lb/MMBtu, annual average	318.134 lb/hr	825.75 TPY
PM-10	0.011 lb/MMBtu, 30-day rolling average	31.11 lb/hr	129.76 TPY
SO ₂	0.15 lb/MMBtu, 30-day rolling average	2279.12 lb/hr	1761.85 TPY
CO	0.10 lb/MMBtu, 30-day rolling average 0.15 lb/MMBtu (startup), 30-day rolling average	403.98 lb/hr	1177.90 TPY

In our April 19, 2007, letter, we discussed "special" short-term emission limitations for startup and shutdown, and for routine (non-startup/shutdown) operations, that were presented in Appendix K of the permit application. Those emission limitations that the applicant presented are summarized in the table, below.

Pollutant	Normal Operations		Startup/Shutdown	
	Emission Limit (lb/hr)	Averaging Time	Emission Limit (lb/hr)	Averaging Time
SO ₂	424.2	3-hour average	908	3-hour average
NO _x	318.1	24-hour average	303	Startup/Shutdown average
CO	282.8	24-hour average	404	Startup/Shutdown average

The draft permit only includes the longer averaging times (annual for NO_x, and 30-day rolling for SO₂, and CO). The short term emission limits presented in the application and discussed in our previous letter do not appear in the permit. Furthermore, we recently became aware of an addendum submitted by the applicant which revises the startup and shutdown emission rate for SO₂, increasing this proposed limit from 908 lb/hr to 2279.12 lb/hr.

As we commented in our April 19th letter, BACT limits are meant to apply during all periods of operation. Thus, BACT limits are not to be waived during periods of startup, shutdown, and maintenance. Secondary emission limits must be justified as BACT and this demonstration should be included in the permit application.¹ Should the applicant justify higher BACT limits

¹ See: In re Prairie State Generating Co., PSD Appeal No. 05-05, at 113-118 (EAB, August 24, 2006), 13 E.A.D. ___; In re Tallmadge Generating Station, PSD Appeal No. 12-12, at 28 (EAB, May 21, 2003); In re Indeck-Niles Energy Center, PSD Appeal No. 04-01, at 15-18 (EAB, Sept. 30, 2004), In re Rockgen Energy Center, 8 E.A.D. 536, 554 (EAB 1999)

for startup and shutdown and these limits are approved, then the permit must clearly state the conditions for the alternative emissions limits. In other words, the proposed PSD permit does not indicate that the lb/hr limits are applicable only during periods of startup and shutdown. One could interpret these limits to be valid during all periods of operation.

The CALPUFF modeling performed by the applicant assumes an SO₂ emission rate of 424.2 lb/hr for each of the new units, which is the short term emission rate identified by the applicant for normal routine operation. Therefore the maximum allowable emission rate of 2279.12 lb/hr for SO₂ as identified in the permit documents is not representative of the emissions analyzed by the applicant for the Breton Wilderness Area. The Class I analysis must represent the emissions as proposed in the application as well as the emission limits ultimately memorialized in the construction and operating permit. Should the applicant be granted higher, short term limits than those analyzed in the permit application, these new limits must be evaluated with a revised Class I analysis that reflects these increased emissions. The higher SO₂ limits in the proposed permit are not the limits evaluated by the applicant, thereby causing the Class I analysis included with the PSD application to under represent the impacts to visibility and air quality related values at the Breton Wilderness Area.

Expression of Emission Rates in the Public Notice and Proposed Title V Permit

The text of the Public Notice and the proposed Title V permit inadequately explain what the emission table summaries represent. Specifically, there are three tables with emission data presented in the public notice. The first two indicate the change in annual emissions (tons per year) for the two phases of this project. The "Change" column in these tables shows significant decreases in both SO₂ and NO_x emissions, with the overall decrease in SO₂ amounting to more than 6,600 tons per year, and for NO_x nearly 30,000 tons per year. However, the third table, which presents the PSD applicability analysis, indicates that SO₂ is increasing by 3,533 tons per year and NO_x is only decreasing by 2,029 tons per year. This discrepancy is not explained. It is our understanding that the baseline for the first two tables is the current permitted allowable emissions, while the baseline for the third table is the representative past actual emission rates. The meaning of the data in these tables should be clarified for the general public to appreciate that the approval of this PSD construction permit action, while significantly lowering the allowable emissions from the facility, will actually result in an increase in SO₂ emissions.

The FWS appreciates the opportunity to comment on these proposed permits. We look forward to continuing to work with the Louisiana Department of Environmental Quality to ensure protection of air quality and air quality related values at the Breton Wilderness Area. Should you have any questions regarding these comments please do not hesitate to contact me at (303) 914-3801 or you may also contact Jill Webster at (303) 914-3804

Sincerely,



Sandra V. Silva, Chief
Branch of Air Quality

cc:

Kenneth Litzenberger
Project Manager
Southeast Louisiana Refuges
61389 Hwy. 434
Lacombe, LA 70445

Jon Andrew
Chief of Refuges
FWS Region 4
1875 Century Blvd., Suite 400
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Shannon Snyder
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Erik Snyder
Regional Modeler
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United States Department of the Interior



FISH AND WILDLIFE SERVICE

National Wildlife Refuge System

Branch of Air Quality

7333 W. Jefferson Ave., Suite 375

Lakewood, CO 80235-2017

IN REPLY REFER TO:
FWS/ANWS-AR-AQ

April 19, 2007

Ms. Cheryl Nolan
Administrator
Air Permits Division
Louisiana Department of Environmental Quality
PO Box 4313
Baton Rouge, Louisiana 70821-4313

Subject: Entergy Louisiana LLC, Little Gypsy 3 Repowering Project

Dear Ms. Nolan:

The US Fish and Wildlife Service, Branch of Air Quality has completed its review of the Little Gypsy Unit 3 Repowering Project, located in Montz, St. Charles Parish, Louisiana. The facility is located approximately 160 km west of the Breton National Wildlife Refuge, a Class I area administered by the US Fish and Wildlife Service. We appreciate the opportunity to provide comment on this permit application.

Our concerns are primarily focused on the proposed special permit conditions specified in Appendix K of the application. This appendix includes proposed short term emissions limits, startup and shutdown limits, and higher best available control technology (BACT) limits during the first 12 months of operation of the new units.

Best Available Control Technology Limits

The Prevention of Significant (PSD) permitting program requires that new or modified sources, such as Little Gypsy, meet emission limitations that represent BACT. We have reviewed the BACT provisions provided in the permit application and have concerns with the averaging times and hourly limits included in the application.

Entergy Louisiana, LLC, is proposing to decommission an existing boiler and replace it with two Circulating Fluidized Bed (CFB) boilers. The new CFB boilers will primarily operate on the combustion of petroleum coke and, when available, coal.

The applicant's proposed BACT limit for sulfur dioxide (SO₂) is 0.15 lb/MMBtu based on a 12-month rolling average. Visibility impacts are analyzed based on 24-hour averages. Therefore, BACT limits are typically expressed in lb/MMBtu for short term averaging periods. BACT limits based on a 12-month rolling average do not account for shorter-term variability in emissions during some periods of operation.

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The applicant derives short-term SO₂ emission limits based on the proposed BACT limit and assuming a maximum heat input of "105% of the average."¹ It is unclear what this means, but appears to represent 105% of the rated boiler capacity. The resulting maximum SO₂ emission limit is 424.2 lb/hr, over a 3-hour averaging period. While it is possible to express BACT limits in pounds per hour assuming a specified capacity, it is unlikely that the unit will constantly operate at that capacity. Therefore during periods of normal operation at less than maximum capacity, the specified pounds per hour limit may actually provide for a higher per-unit-heat-input emission limit that does not represent BACT. In other words, while the hourly SO₂ limit of 424.2 lb/hr may represent BACT while operation is at maximum capacity, it is a more lenient limit when operating at less than maximum capacity and thus does not represent the most protective level of control.

In addition, New Source Performance Standards (NSPS) for SO₂, as well as nitrogen oxides (NO_x), are expressed as a lb/MMBtu limit on a 30-day rolling average. BACT limits based on 12-month rolling averages do not meet the NSPS.

FWS suggests that Louisiana DEQ consider including both lb/hr limits and lb/MMBtu limits in its BACT determination for the Little Gypsy Unit 3 boilers. It is important that the BACT determination include limits with averaging times consistent with the standards being protected, including Class I area visibility, 3-hour and 24-hour National Ambient Air Quality Standards and PSD increments.

Special Permit Conditions

Included in Appendix K are specific emission limitations for startup and shutdown of the new unit. Startup is defined as the period before the unit has reached 60% of the boiler design capacity and shutdown is defined as when the boiler is brought below 60% of design capacity. The following are the specified limits for SO₂, NO_x, and carbon monoxide (CO):

Pollutant	Emission Limit (lb/hr)	Averaging Time
SO ₂	908	3-hour average
NO _x	303	Startup/Shutdown average
CO	404	Startup/Shutdown average

BACT limits are meant to apply during all periods of operation. Thus, BACT limits are not to be waived during periods of startup, shutdown, and maintenance. Secondary emission limits must be justified as BACT and this demonstration should be included in the permit application.² In addition, higher operational limits which are justified as BACT for startup and shutdown operation should be included in the CALPUFF modeling demonstration.

¹ Appendix D to September 6, 2006, permit application, emissions calculation spreadsheet (2006-06) 5 Entergy CFB calcs(rev).six, Units 3A & 3B Summary), footnote 1 on page 5 of 5.

² See: In re Prairie State Generating Co., PSD Appeal No. 05-05, at 113-118 (EAB, August 24, 2006), 15 E.A.D. ____; In re Tallmadge Generating Station, PSD Appeal No. 12-12, at 28 (EAB, May 21, 2003), In re Indeck-Niles Energy Center, PSD Appeal No. 04-01, at 15-18 (EAB, Sept. 30, 2004); In re Rockgen Energy Center, 8 E.A.D. 536, 554 (EAB 1999)

Also included in Appendix K of the application are specific BACT limits for the first 12 months of operation. These limits are as follows:

Pollutant	Emission Limit (30 day rolling average)
PM ₁₀	0.015 lb/MMBtu
SO ₂	0.20 lb/MMBtu
NO _x	0.15 lb/MMBtu
CO	0.15 lb/MMBtu
VOC	0.0070 lb/MMBtu

The application does not provide any explanation or justification to rationalize the need for higher BACT limits during the first 12 months of operation.

Finally, the facility anticipates that during initial startup, the new CFB boilers will undergo approximately 50 startup and shutdowns. This appears to be a high number of startups and shutdowns for the selected equipment, which is not considered "new" technology.

FWS suggests that the applicant should provide top-down BACT analyses to justify its proposed emission limits for startup and shutdown operations and for the initial 12 months of operation, and explain its need for the initial year's limits to be higher.

Again, the FWS appreciates the opportunity to comment on this permit application. Should you have any questions regarding these comments please do not hesitate to contact me at (303) 914-3801 or you may also contact Jill Webster at (303) 914-3804.

Sincerely,



Sandra V. Silva, Chief
Branch of Air Quality

cc:

Kenneth Litzenberger
Project Manager
Southeast Louisiana Refuges
61389 Hwy. 434
Lacombe, LA 70445

Jon Andrew
Chief, Southeast Region
National Wildlife Refuge System
FWS Region 4
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Erik Snyder
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Exhibit B

Dustin Duhon

From: Begg, Ethan [ethan.begg@shawgrp.com]
Sent: Thursday, September 20, 2007 3:31 PM
To: Dustin Duhon
Cc: SCHOTT, JIM; WALDENFELS, JULIE; Keys, Renee; Saxton, Deborah; Bergeron, Jeff
Subject: RE: Entergy Little Gypsy EIQ sheets
Attachments: Entergy LG EIQ Sheets rev1 9-20-2007.pdf

Dustin,

Per your request, I have modified the EIQ sheets for Unit 3 only and am resubmitting the information. The attached PDF file contains all EIQ sheets that were submitted this morning, so you can discard the file and email that was sent this morning. The attached file has all of the CO and NOX changes for EQT003-EQT006 exactly the same as were transmitted this morning. The only difference in this submittal is that the average, maximum, and annual NOX emissions for Unit 3 (EQT007) have been changed to reflect the information in your email below. The average NOX emission rates were changed back to the rates that were submitted in the October 2006 update.

Please review the file and let me know if you have any comments or questions.

Thanks, and have a good day!
Ethan

From: Dustin Duhon [mailto:Dustin.Duhon@LA.GOV]
Sent: Thursday, September 20, 2007 8:07 AM
To: Begg, Ethan
Subject: RE: Entergy Little Gypsy EIQ sheets

Regarding the following change:

- EQT007 – NOX annual emission rate changed to 29,799 tpy on Gas firing.

Do not make this change. Here is why:

After discussions with Entergy, it has been determined that the more appropriate method by which to address Entergy's concerns is to change the maximum lb/hr NOx emission rate for this source from 3624.60 lb/hr to 4462.00 lb/hr. The annual emission rate will be unchanged.

Please revise your submittal to reflect the change mentioned above. Jim and I discussed this a month or so back and this was determined to be the best solution.

Dustin Duhon
Environmental Chemical Specialist
Louisiana Department of Environmental Quality
Air Permits Division
225-219-3057
Fax: 225-219-3309

From: Begg, Ethan [mailto:ethan.begg@shawgrp.com]
Sent: Thursday, September 20, 2007 7:59 AM
To: Dustin Duhon
Cc: SCHOTT, JIM; Keys, Renee; WALDENFELS, JULIE; Saxton, Deborah; Bergeron, Jeff
Subject: Entergy Little Gypsy EIQ sheets
Importance: High

9/21/2007

Dustin,

Per your email to Jim Schott yesterday, please find attached the revised EIQ sheets for the following:

- EQT003 (C1A – Unit 1, Stack A)
- EQT004 (C1B – Unit 1, Stack B)
- EQT005 (C2A – Unit 2, Stack A)
- EQT006 (C2B – Unit 2, Stack B)
- EQT007 (C3 – Unit 3)

The changes were made to reflect the items indicated in the comments submitted to your office regarding the draft Title V / PSD air permit on June 15, 2007. The items changed are as follows:

- EQT003 – NOX Maximum emission rate changed to 810 lb/hr.
- EQT004 – NOX Maximum emission rate changed to 810 lb/hr.
- EQT005 – CO Maximum emission rate changed to 391 lb/hr.
- EQT006 – CO Maximum emission rate changed to 391 lb/hr.
- EQT007 – NOX Average and Maximum emission rates changed to 6,803 lb/hr.
- EQT007 – NOX annual emission rate changed to 29,799 tpy on Gas firing.

On EQT007, changes were also made to fuel oil #2 and #4 firings [EIQ sheets C3(2) and C3(3), respectively] due to the change in the average NOX emission rate change to 6,803 lb/hr on natural gas firing [EIQ sheet C3(1)]. The change in C3(1) affects the other EIQ sheets [C3(2) and C3(3)] as the unit can co-fire gas and fuel oil.

Please let me know if you have any comments or questions. I will call you this morning to make sure you have received this information and talk through any remaining issues.

Thanks, and have a good day!
Ethan

Ethan Begg, P.E.
Client Program Manager
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9/21/2007

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(225) 765-0219

LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ) for Air Pollutants



Company Name: **Energy Louisiana, LLC**
Plant location and name (if any): **Energy Little Gypsy Electrical Gen Montiz, La**
Date of Submittal: **August 2006**

Source ID Number: **C1A(1)**
Descriptive name of the equipment served by this stack or vent: **Unit 1 Boiler: Stack A - Natural Gas Fired**
Approximate location of stack or vent:
UTM Zone No. 15 16
Horizontal Coordinate: 744900 mE
Vertical Coordinate: 3322300 mN

Stack and Discharge Physical Characteristics Change: No Yes
Height of stack above grade (ft): 162.000
Diameter (ft) or stack discharge area (ft²): 10.500 (ft)
Stack gas exit temperature (Deg F): 250
Stack gas flow at process conditions, not at standard (ft³/min): 325800
Stack gas exit velocity (ft/sec): 62.700
Date of construction / modification: 1961
Operating rate (Max) or tank capacity: 2,292 MM BTU/hr

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal operating time of this point	Normal Operating Rate	
	Type of fuel	Heat input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov			hrs/day
a	Natural Gas	2292	25	25	25	25	24	7	2,292 MM BTU/hr

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate			Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)			
Particulate matter (PM10)	000	N/A	8.595	8.595	37.646	3	Add	NA
Particulate matter (PM2.5)	000	N/A	8.595	8.595	37.646	3	Add	NA
Sulfur dioxide	000	N/A	0.676	0.676	2.961	3	Add	NA
Nitrogen oxides	000	N/A	744.700	810.000	3261.700	3	Add	NA
Carbon monoxide	000	N/A	94.430	211.283	413.605	3	Add	NA
Total VOC	000	N/A	6.179	6.179	27.066	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.001	0.001	0.006	3	Add	NA
Benzene	000	N/A	0.002	0.002	0.010	3	Add	NA
Formaldehyde	000	N/A	0.084	0.084	0.369	3	Add	NA
Hexane	000	N/A	2.022	2.022	8.858	3	Add	NA
Toluene	000	N/A	0.004	0.004	0.017	3	Add	NA
Naphthalene	000	N/A	0.001	0.001	0.003	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.001	0.001	0.004	3	Add	NA
Arsenic	000	N/A	<0.001	<0.001	0.001	3	Add	NA
Barium	000	N/A	0.005	0.005	0.022	3	Add	NA
Beryllium	000	N/A	<0.001	<0.001	<0.001	3	Add	NA
Cadmium	000	N/A	0.001	0.001	0.005	3	Add	NA



LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
 Emission Inventory Questionnaire (EIQ)
 for Air Pollutants

Department of Environmental Quality
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 (225) 765-0219

Company Name
Energy Louisiana, LLC

Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal
August 2006

Source ID Number
C1A(2)

Approximate location of stack or vent
 UTM Zone No. 15 Horizontal Coordinate 744850 mE
 16 Vertical Coordinate 3322060 mN

Descriptive name of the equipment served by this stack or vent
Unit 1 Boiler: Stack A - 15% No 2 Fuel oil/ 85% Natural Gas

Stack and Discharge Physical Characteristics
 No Yes
 Height of stack above grade (ft) 162.000
 Diameter (ft) or stack discharge area (ft²) 10.500 (ft²)
 Stack gas exit temperature (Deg F) 250
 Stack gas flow at process conditions, not at standard (ft³/min) 325800
 Stack gas exit velocity (ft/sec) 62.700
 Date of construction / modification 1961
 Operating rate (Max) or tank capacity 2,247 MM BTU/hr

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal operating time of this point	Normal Operating Rate
	Type of fuel	Heat input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov		
a	No. 2 Fuel Oil	2247	25	25	25	25	7	52
b	Natural Gas	2292						

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate			Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)			
Particulate matter (PM10)	000	N/A	8.540	8.600	37.390	3	Add	NA
Particulate matter (PM2.5)	000	N/A	7.610	8.600	33.350	3	Add	NA
Sulfur dioxide	000	N/A	87.910	582.250	385.060	3	Add	NA
Nitrogen oxides	000	N/A	744.050	810.000	3258.930	3	Add	NA
Carbon monoxide	000	N/A	86.420	94.430	378.500	3	Add	NA
Total VOC	000	N/A	6.190	6.230	27.100	3	Add	NA
1,1,1-Trichloroethane	000	N/A	<0.001	0.002	0.001	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.001	0.001	0.005	3	Add	NA
Benzene	000	N/A	0.002	0.002	0.010	3	Add	NA
Ethyl benzene	000	N/A	<0.001	0.001	<0.001	3	Add	NA
Formaldehyde	000	N/A	0.112	0.271	0.492	3	Add	NA
Hexane	000	N/A	1.719	2.020	7.529	3	Add	NA
Toluene	000	N/A	0.011	0.051	0.048	3	Add	NA
Xylene (o-)	000	N/A	<0.001	0.001	0.001	3	Add	NA
Naphthalene	000	N/A	0.002	0.010	0.009	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.006	0.037	0.027	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	0.000	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C1A(2)

Descriptive name of the equipment served by this stack or vent

Unit 1 Boiler: Stack A - 15% No 2 Fuel oil/ 85% Natural Gas

Approximate location of stack or vent

UTM Zone No. 15 16 Horizontal Coordinate 744850 mE Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics
Change No Yes

Height of stack above grade (ft) 162.000

Diameter (ft) or stack discharge area (ft²) 10.500 (ft) (ft²)

Stack gas exit temperature (Deg F) 250

Stack gas flow at process conditions, not at standard (ft³/min) 325800

Stack gas exit velocity (ft/sec) 62.700

Date of construction / modification 1961

Operating rate (Max) or tank capacity 2,247 MM BTU/hr

Type of fuel used and heat input

Type of fuel	Heat input (MMBTU/hr)
a No. 2 Fuel Oil	2247
b Natural Gas	2292

Operating Characteristics

Percent of annual throughput of pollutants through this emission point			Normal operating time of this point			
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr
25	25	25	25	24	7	52

Normal Operating Rate 2,247 MM BTU/hr

Air Pollutant Specific Information

Pollutant	000	N/A	0.001	0.004	0.004	0.004	0.004	3	Add	Normal Operating Rate
Arsenic	000	N/A	0.001	0.004	0.004	0.004	0.004	3	Add	NA
Barium	000	N/A	0.004	0.005	0.018	0.018	0.018	3	Add	NA
Beryllium	000	N/A	0.001	0.003	0.002	0.002	0.002	3	Add	NA
Cadmium	000	N/A	0.002	0.003	0.007	0.007	0.007	3	Add	NA
Chromium	000	N/A	0.002	0.003	0.008	0.008	0.008	3	Add	NA
Chromium VI	000	N/A	0.001	0.001	0.002	0.002	0.002	3	Add	NA
Cobalt	000	N/A	0.000	0.000	0.000	0.000	0.000	3	Add	NA
Copper	000	N/A	0.002	0.007	0.008	0.008	0.008	3	Add	NA
Lead	000	N/A	0.002	0.010	0.009	0.009	0.009	3	Add	NA
Manganese	000	N/A	0.001	0.007	0.006	0.006	0.006	3	Add	NA
Mercury	000	N/A	0.001	0.003	0.003	0.003	0.003	3	Add	NA
Nickel	000	N/A	0.003	0.003	0.011	0.011	0.011	3	Add	NA
Selenium	000	N/A	0.003	0.017	0.011	0.011	0.011	3	Add	NA
Zinc	000	N/A	0.028	0.033	0.124	0.124	0.124	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C1A(3)

Descriptive name of the equipment served by this stack or vent

Unit 1 Boiler: Stack A - 15% No 4 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent

UTM Zone No. 15 16
Horizontal Coordinate
Vertical Coordinate

744850 mE
3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft)

Stack gas exit temperature (Deg F)
250

Stack gas flow at process conditions, not at standard (ft³/min)
325800

Stack gas exit velocity (ft/sec)
 15 16

Date of construction / modification
1961

Operating rate (Max) or tank capacity
2,247 MM BTU/hr

Type of fuel used and heat input

Type of fuel

Heat Input (MMBTU/hr)

a Natural Gas 2292

b No. 4 Fuel Oil 2247

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr
25	25	25	25	24	7	52

Normal operating time of this point

Normal Operating Rate
2,247 MM BTU/hr

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	13.100	38.400	3	Add	NA
Particulate matter (PM2.5)	000	N/A	11.500	28.000	3	Add	NA
Sulfur dioxide	000	N/A	87.700	581.100	3	Add	NA
Nitrogen oxides	000	N/A	737.900	810.000	3	Add	NA
Carbon monoxide	000	N/A	86.100	211.300	3	Add	NA
Total VOC	000	N/A	6.140	6.200	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.000	0.002	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.001	0.001	3	Add	NA
Benzene	000	N/A	0.002	0.002	3	Add	NA
Ethyl benzene	000	N/A	<0.001	0.001	3	Add	NA
Formaldehyde	000	N/A	0.110	0.256	3	Add	NA
Hexane	000	N/A	1.719	2.020	3	Add	NA
Toluene	000	N/A	0.010	0.048	3	Add	NA
Xylene (o-)	000	N/A	0.000	0.001	3	Add	NA
Naphthalene	000	N/A	0.002	0.009	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.003	0.019	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name
Energy Louisiana, LLC

Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal
August 2006

Source ID Number
C1A(3)

Descriptive name of the equipment served by this stack or vent
Unit 1 Boiler: Stack A - 15% No 4 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent
UTM Zone No. 15 16
Horizontal Coordinate
Vertical Coordinate

744850 mE
3322060 mN

Stack and Discharge Physical Characteristics
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft)

Stack gas exit temperature (Deg F)
250

Stack gas flow at process conditions, not at standard (ft³/min)
325800

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1961

Operating rate (Max) or tank capacity
2,247 MM BTU/hr

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
Natural Gas	2292
No. 4 Fuel Oil	2247

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point	
Dec-Feb	Mar-May	hrs/day	days/wk
25	25	25	7
25	25	24	52

Normal Operating Rate
2,247 MM BTU/hr

Air Pollutant Specific Information

Antimony	000	N/A	0.006	0.041	0.027	3	Add	NA
Arsenic	000	N/A	0.002	0.010	0.008	3	Add	NA
Barium	000	N/A	0.007	0.020	0.031	3	Add	NA
Beryllium	000	N/A	0.000	0.000	0.000	3	Add	NA
Cadmium	000	N/A	0.002	0.003	0.007	3	Add	NA
Chromium	000	N/A	0.002	0.007	0.010	3	Add	NA
Chromium VI	000	N/A	0.001	0.002	0.003	3	Add	NA
Cobalt	000	N/A	0.007	0.047	0.031	3	Add	NA
Copper	000	N/A	0.003	0.014	0.013	3	Add	NA
Lead	000	N/A	0.002	0.012	0.010	3	Add	NA
Manganese	000	N/A	0.004	0.023	0.017	3	Add	NA
Mercury	000	N/A	0.000	0.001	0.002	3	Add	NA
Nickel	000	N/A	0.100	0.655	0.439	3	Add	NA
Selenium	000	N/A	0.001	0.005	0.004	3	Add	NA
Zinc	000	N/A	0.062	0.225	0.269	3	Add	NA
Hydrogen chloride	000	N/A	0.415	2.764	1.816	3	Add	NA
Hydrogen fluoride	000	N/A	0.043	0.289	0.190	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name
Energy Louisiana, LLC

Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal
August 2006

Source ID Number
C1B(1)

Descriptive name of the equipment served by this stack or vent
Unit 1 Boiler: Stack B - Natural Gas Fired

Approximate location of stack or vent
UTM Zone No. 15 Horizontal Coordinate 744900 mE
 16 Vertical Coordinate 3322300 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft) 162,000

Diameter (ft) or stack discharge area (ft²) 10,500 (ft) (ft²)

Stack gas exit temperature (Deg F) 250

Stack gas flow at process conditions, not at standard (ft³/min) 325800

Stack gas exit velocity (ft/sec) 62,700

Date of construction / modification 1961

Operating rate (Max) or tank capacity 2,292 MM BTU/hr

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal operating time of this point	Normal Operating Rate
	Type of fuel	Heat input (MMBTU/hr)	Average (lbs/hr)	Maximum (lbs/hr)	Emission Rate (tons/yr)	Annual (tons/yr)		
a	Natural Gas	2292	8,595	8,595	37,646	37,646	25	2,292 MM BTU/hr

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	8,595	8,595	3	Add	NA
Particulate matter (PM2.5)	000	N/A	8,595	8,595	3	Add	NA
Sulfur dioxide	000	N/A	0,676	0,676	3	Add	NA
Nitrogen oxides	000	N/A	744,700	810,000	3	Add	NA
Carbon monoxide	000	N/A	94,430	211,283	3	Add	NA
Total VOC	000	N/A	6,179	6,179	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0,001	0,001	3	Add	NA
Benzene	000	N/A	0,002	0,002	3	Add	NA
Formaldehyde	000	N/A	0,084	0,084	3	Add	NA
Hexane	000	N/A	2,022	2,022	3	Add	NA
Toluene	000	N/A	0,004	0,004	3	Add	NA
Naphthalene	000	N/A	0,001	0,001	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0,001	0,001	3	Add	NA
Arsenic	000	N/A	<0,001	<0,001	3	Add	NA
Barium	000	N/A	0,005	0,005	3	Add	NA
Beryllium	000	N/A	<0,001	<0,001	3	Add	NA
Cadmium	000	N/A	0,001	0,001	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C1B(1)

Descriptive name of the equipment served by this stack or vent

Unit 1 Boiler: Stack B - Natural Gas Fired

Approximate location of stack or vent

UTM Zone No. 15 16
Horizontal Coordinate
Vertical Coordinate

744900 mE
3322300 mN

Stack and Discharge Physical Characteristics Change

No Yes

Height of stack above grade (ft)

162.000

Diameter (ft) or stack discharge area (ft²)

10.500 (ft)
(ft²)

Stack gas exit temperature (Deg F)

250

Stack gas flow at process conditions, not at standard (ft³/min)

325800

Stack gas exit velocity (ft/sec)

62.700

Date of construction / modification

1961

Operating rate (Max) or tank capacity

2,292 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel

Natural Gas

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb 25
Mar-May 25
Jun-Aug 25
Sep-Nov 25

Normal operating time of this point

days/wk 7
wks/yr 52

Normal Operating Rate

2,292 MM BTU/hr

Air Pollutant Specific Information

Fuel	Type of fuel	Heat Input (MMBTU/hr)	Operating Characteristics															
			Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr	Stack gas exit velocity (ft/sec)	Stack gas flow at process conditions, not at standard (ft ³ /min)	Stack gas exit temperature (Deg F)	Diameter (ft) or stack discharge area (ft ²)	Height of stack above grade (ft)	Operating rate (Max) or tank capacity			
Chromium	000	N/A	0.002	0.002	0.002	0.007	3	Add	3	24	7	52	62.700	325800	250	10.500 (ft) (ft ²)	162.000	2,292 MM BTU/hr
Chromium VI	000	N/A	<0.001	<0.001	<0.001	0.002	3	Add	3	24	7	52	<0.001	<0.001	<0.001	<0.001	<0.001	2,292 MM BTU/hr
Cobalt	000	N/A	<0.001	<0.001	<0.001	<0.001	3	Add	3	24	7	52	<0.001	<0.001	<0.001	<0.001	<0.001	2,292 MM BTU/hr
Copper	000	N/A	0.001	0.001	0.001	0.004	3	Add	3	24	7	52	0.001	0.001	0.001	0.001	0.001	2,292 MM BTU/hr
Lead	000	N/A	0.001	0.001	0.001	0.002	3	Add	3	24	7	52	0.001	0.001	0.001	0.001	0.001	2,292 MM BTU/hr
Manganese	000	N/A	<0.001	<0.001	<0.001	0.002	3	Add	3	24	7	52	<0.001	<0.001	<0.001	<0.001	<0.001	2,292 MM BTU/hr
Mercury	000	N/A	<0.001	<0.001	<0.001	0.001	3	Add	3	24	7	52	<0.001	<0.001	<0.001	<0.001	<0.001	2,292 MM BTU/hr
Nickel	000	N/A	0.002	0.002	0.010	0.010	3	Add	3	24	7	52	0.002	0.010	0.010	0.010	0.010	2,292 MM BTU/hr
Selenium	000	N/A	<0.001	<0.001	<0.001	<0.001	3	Add	3	24	7	52	<0.001	<0.001	<0.001	<0.001	<0.001	2,292 MM BTU/hr
Zinc	000	N/A	0.033	0.033	0.143	0.143	3	Add	3	24	7	52	0.033	0.143	0.143	0.143	0.143	2,292 MM BTU/hr



LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
 Emission Inventory Questionnaire (EIQ)
 for Air Pollutants

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Company Name
Energy Louisiana, LLC
 Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La
 Date of Submittal
August 2006

Source ID Number
C1B(2)
 Descriptive name of the equipment served by this stack or vent
Unit 1 Boiler: Stack B - 15% No 2 Fuel Oil / 85% Natural Gas
 Approximate location of stack or vent
 UTM Zone No. 15 16 Horizontal Coordinate 744837 mE Vertical Coordinate 3322063 mN

Stack and Discharge Physical Characteristics
 Change No Yes
 Height of stack above grade (ft) 162.000
 Diameter (ft) or stack discharge area (ft²) 10.500 (ft) 10.500 (ft²)
 Stack gas exit temperature (Deg F) 250
 Stack gas flow at process conditions, not at standard (ft³/min) 325800
 Stack gas exit velocity (ft/sec) 62.700
 Date of construction / modification 1961
 Operating rate (Max) or tank capacity 2,247 MM BTU/hr

Fuel

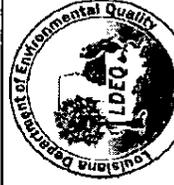
Type of fuel used and heat input		Operating Characteristics	
Type of fuel	Heat Input (MMBTU/hr)	Percent of annual throughput of pollutants through this emission point	
a No. 2 Fuel Oil	2247	Dec-Feb	25
b Natural Gas	2292	Mar-May	25
		Jun-Aug	25
		Sep-Nov	24
		hrs/day	7
		days/wk	52
		Normal operating time of this point	2,247 MM BTU/hr

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate			Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)			
Particulate matter (PM10)	000	N/A	8.540	8.600	37.390	3	Add	NA
Particulate matter (PM2.5)	000	N/A	7.610	8.600	33.350	3	Add	NA
Sulfur dioxide	000	N/A	87.910	582.250	365.060	3	Add	NA
Nitrogen oxides	000	N/A	744.050	810.000	3258.930	3	Add	NA
Carbon monoxide	000	N/A	86.420	94.430	378.500	3	Add	NA
Total VOC	000	N/A	6.190	6.230	27.100	3	Add	NA
1,1,1-Trichloroethane	000	N/A	<0.001	0.002	0.001	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.001	0.001	0.005	3	Add	NA
Benzene	000	N/A	0.002	0.002	0.010	3	Add	NA
Ethyl benzene	000	N/A	<0.001	0.001	<0.001	3	Add	NA
Formaldehyde	000	N/A	0.112	0.271	0.492	3	Add	NA
Hexane	000	N/A	1.719	2.020	7.529	3	Add	NA
Toluene	000	N/A	0.011	0.051	0.048	3	Add	NA
Xylene (o-)	000	N/A	<0.001	0.001	0.001	3	Add	NA
Naphthalene	000	N/A	0.002	0.010	0.009	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.006	0.037	0.027	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	0.000	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Entergy Louisiana, LLC

Plant location and name (if any)

Entergy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C1B(2)

Descriptive name of the equipment served by this stack or vent

Unit 1 Boiler: Stack B - 15% No 2 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent

UTM Zone No. 15 Horizontal Coordinate 744837 mE
 16 Vertical Coordinate 3322063 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft)

Stack gas exit temperature (Deg F)
250

Stack gas flow at process conditions, not at standard (ft³/min)
325800

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1961

Operating rate (Max) or tank capacity
2,247 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
a No. 2 Fuel Oil	2247
b Natural Gas	2292

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point	
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
25	25	25	25
hrs/day		24	7
days/wk		7	52
wks/yr		7	52

Normal Operating Rate

2,247 MM BTU/hr

Air Pollutant Specific Information

Air Pollutant	000	N/A	0.001	0.004	0.004	0.004	3	Add	Normal Operating Rate
Arsenic	000	N/A	0.001	0.004	0.004	0.004	3	Add	NA
Barium	000	N/A	0.004	0.005	0.018	0.018	3	Add	NA
Beryllium	000	N/A	0.001	0.003	0.002	0.002	3	Add	NA
Cadmium	000	N/A	0.002	0.003	0.007	0.007	3	Add	NA
Chromium	000	N/A	0.002	0.003	0.008	0.008	3	Add	NA
Chromium VI	000	N/A	0.001	0.001	0.002	0.002	3	Add	NA
Cobalt	000	N/A	0.000	0.000	0.000	0.000	3	Add	NA
Copper	000	N/A	0.002	0.007	0.008	0.008	3	Add	NA
Lead	000	N/A	0.002	0.010	0.009	0.009	3	Add	NA
Manganese	000	N/A	0.001	0.007	0.006	0.006	3	Add	NA
Mercury	000	N/A	0.001	0.003	0.003	0.003	3	Add	NA
Nickel	000	N/A	0.003	0.003	0.011	0.011	3	Add	NA
Selenium	000	N/A	0.003	0.017	0.011	0.011	3	Add	NA
Zinc	000	N/A	0.028	0.033	0.124	0.124	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C1B(3)

Descriptive name of the equipment served by this stack or vent

Unit 1 Boiler: Stack B - 15% No 4 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent

UTM Zone No. 15 16
Horizontal Coordinate 744850 mE
Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft)

Stack gas exit temperature (Deg F)
250

Stack gas flow at process conditions, not at standard (ft³/min)
325800

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1961

Operating rate (Max) or tank capacity
2,247 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
Natural Gas	2292
No. 4 Fuel Oil	2292

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point	
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
25	25	25	25
hrs/day		days/wk	
24		7	
wks/yr		52	

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	13.100	38.400	3	Add	NA
Particulate matter (PM2.5)	000	N/A	11.500	28.000	3	Add	NA
Sulfur dioxide	000	N/A	87.700	581.100	3	Add	NA
Nitrogen oxides	000	N/A	737.900	810.000	3	Add	NA
Carbon monoxide	000	N/A	86.100	211.300	3	Add	NA
Total VOC	000	N/A	6.140	6.200	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.000	0.002	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.001	0.001	3	Add	NA
Benzene	000	N/A	0.002	0.002	3	Add	NA
Ethyl benzene	000	N/A	<0.001	0.001	3	Add	NA
Formaldehyde	000	N/A	0.110	0.256	3	Add	NA
Hexane	000	N/A	1.719	2.020	3	Add	NA
Toluene	000	N/A	0.010	0.048	3	Add	NA
Xylene (o-)	000	N/A	0.000	0.001	3	Add	NA
Naphthalene	000	N/A	0.002	0.009	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.003	0.019	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	3	Add	NA



LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
 Emission Inventory Questionnaire (EIQ)
 for Air Pollutants

Department of Environmental Quality
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 Permits Division
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 Baton Rouge, LA 70884-2135
 (225) 765-0219

Company Name
Energy Louisiana, LLC

Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal
August 2006

Source ID Number
C1B(3)

Descriptive name of the equipment served by this stack or vent
Unit 1 Boiler: Stack B - 15% No 4 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent
 UTM Zone No. 15 16
 Horizontal Coordinate
 Vertical Coordinate

744850 mE
 3322060 mN

Stack and Discharge Physical Characteristics
 No Yes

Height of stack above grade (ft)
 162.000

Diameter (ft) or stack discharge area (ft²)
 10.500 (ft)
 (ft²)

Stack gas exit temperature (Deg F)
 250

Stack gas flow at process conditions, not at standard (ft³/min)
 325800

Stack gas exit velocity (ft/sec)
 62.700

Date of construction / modification
 1961

Operating rate (Max) or tank capacity
 2,247 MM BTU/hr

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
a Natural Gas	2292
b No. 4 Fuel Oil	2292

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point				
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr
25	25	25	25	24	7	52

Normal Operating Rate
 2,247 MM BTU/hr

Air Pollutant Specific Information

Antimony	000	N/A	0.006	0.041	0.027	3	Add	NA
Arsenic	000	N/A	0.002	0.010	0.008	3	Add	NA
Barium	000	N/A	0.007	0.020	0.031	3	Add	NA
Beryllium	000	N/A	0.000	0.000	0.000	3	Add	NA
Cadmium	000	N/A	0.002	0.003	0.007	3	Add	NA
Chromium	000	N/A	0.002	0.007	0.010	3	Add	NA
Chromium VI	000	N/A	0.001	0.002	0.003	3	Add	NA
Cobalt	000	N/A	0.007	0.047	0.031	3	Add	NA
Copper	000	N/A	0.003	0.014	0.013	3	Add	NA
Lead	000	N/A	0.002	0.012	0.010	3	Add	NA
Manganese	000	N/A	0.004	0.023	0.017	3	Add	NA
Mercury	000	N/A	0.000	0.001	0.002	3	Add	NA
Nickel	000	N/A	0.100	0.655	0.439	3	Add	NA
Selenium	000	N/A	0.001	0.005	0.004	3	Add	NA
Zinc	000	N/A	0.062	0.225	0.269	3	Add	NA
Hydrogen chloride	000	N/A	0.415	2.764	1.816	3	Add	NA
Hydrogen fluoride	000	N/A	0.043	0.289	0.190	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C2A(1)

Descriptive name of the equipment served by this stack or vent

Unit 2 Boiler: Stack A - Natural Gas Fired

Approximate location of stack or vent

UTM Zone No. 15 Horizontal Coordinate
 16 Vertical Coordinate

744900 mE
3322300 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
182.000

Diameter (ft) or stack discharge area (ft²)
13.000 (ft)
(ft²)

Stack gas exit temperature (Deg F)
261

Stack gas flow at process conditions, not at standard (ft³/min)
612500

Stack gas exit velocity (ft/sec)
76.900

Date of construction / modification
1966

Operating rate (Max) or tank capacity
4,550 MM BTU/hr

Type of fuel used and heat input

Type of fuel
Natural Gas

Heat input (MMBTU/hr)
4550

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Normal operating time of this point
25	25	25	25	days/wk
				hrs/day
				7
				wks/yr
				52

Normal Operating Rate

4,550 MM BTU/hr

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	17.063	17.063	3	Add	NA
Particulate matter (PM2.5)	000	N/A	17.063	17.063	3	Add	NA
Sulfur dioxide	000	N/A	1.342	1.342	3	Add	NA
Nitrogen oxides	000	N/A	1151.400	1151.400	3	Add	NA
Carbon monoxide	000	N/A	187.460	391.000	3	Add	NA
Total VOC	000	N/A	12.267	12.267	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.003	0.003	3	Add	NA
Benzene	000	N/A	0.005	0.005	3	Add	NA
Formaldehyde	000	N/A	0.167	0.167	3	Add	NA
Hexane	000	N/A	4.015	4.015	3	Add	NA
Toluene	000	N/A	0.008	0.008	3	Add	NA
Naphthalene	000	N/A	0.001	0.001	3	Add	NA
Phenanthrene	000	N/A	<0.001	<0.001	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.002	0.002	3	Add	NA
Arsenic	000	N/A	<0.001	<0.001	3	Add	NA
Barium	000	N/A	0.010	0.010	3	Add	NA
Beryllium	000	N/A	<0.001	<0.001	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Entergy Louisiana, LLC

Plant location and name (if any)

Entergy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C2A(1)

Descriptive name of the equipment served by this stack or vent

Unit 2 Boiler: Stack A - Natural Gas Fired

Approximate location of stack or vent

UTM Zone No. 15 16 Horizontal Coordinate Vertical Coordinate

744900 mE
3322300 mN

Stack and Discharge Physical Characteristics
Change No Yes

Height of stack above grade (ft)
182,000

Diameter (ft) or stack discharge area (ft²)
13,000 (ft)
(ft²)

Stack gas exit temperature (Deg F)
261

Stack gas flow at process conditions, not at standard (ft³/min)
612500

Stack gas exit velocity (ft/sec)
76,900

Date of construction / modification
1966

Operating rate (Max) or tank capacity
4,550 MM BTU/hr

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
Natural Gas	4550

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point				
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr
25	25	25	25	24	7	52

Normal Operating Rate
4,550 MM BTU/hr

Air Pollutant Specific Information

Pollutant	000	N/A	0.002	0.002	0.002	0.011	3	Add	NA
Cadmium	000	N/A	0.002	0.002	0.011	3	Add	NA	
Chromium	000	N/A	0.003	0.003	0.014	3	Add	NA	
Chromium VI	000	N/A	0.001	0.001	0.004	3	Add	NA	
Cobalt	000	N/A	<0.001	<0.001	0.001	3	Add	NA	
Copper	000	N/A	0.002	0.002	0.008	3	Add	NA	
Lead	000	N/A	0.001	0.001	0.005	3	Add	NA	
Manganese	000	N/A	0.001	0.001	0.004	3	Add	NA	
Mercury	000	N/A	0.001	0.001	0.003	3	Add	NA	
Nickel	000	N/A	0.005	0.005	0.021	3	Add	NA	
Selenium	000	N/A	<0.001	<0.001	<0.001	3	Add	NA	
Zinc	000	N/A	0.065	0.065	0.283	3	Add	NA	

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name Energy Louisiana, LLC		Plant location and name (if any) Energy Little Gypsy Electrical Gen Montz, La		Date of Submittal August 2006
Source ID Number C2A(2)	Descriptive name of the equipment served by this stack or vent Unit 2 Boiler: Stack A - 100% No. 2 Fuel Oil			Approximate location of stack or vent UTM Zone No. <input checked="" type="checkbox"/> 15 <input type="checkbox"/> 16 Horizontal Coordinate 744798 mE Vertical Coordinate 3322073 mN
Stack and Discharge Physical Characteristics Change <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Height of stack above grade (ft) 182.000	Diameter (ft) or stack discharge area (ft ²) 13.000 (ft ²)	Stack gas exit temperature (Deg F) 261	Stack gas flow at process conditions, not at standard (ft ³ /min) 612500
Type of fuel used and heat input		Stack gas exit velocity (ft/sec) 76.900		
Type of fuel a No. 2 Fuel Oil	Heat Input (MMBTU/hr) 3692	Percent of annual throughput of pollutants through this emission point Dec-Feb 25 Mar-May 25 Jun-Aug 25 Sep-Nov 25		Date of construction / modification 1966
		Operating Characteristics		Operating rate (Max) or tank capacity 3,692 MM BTU/hr
				Normal operating time of this point days/wk 7 wks/yr 52
				Operating Rate 3,692 MM BTU/hr

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	13.474	13.474	3	Add	NA
Particulate matter (PM2.5)	000	N/A	3.369	3.369	3	Add	NA
Sulfur dioxide	000	N/A	957.000	957.000	3	Add	NA
Nitrogen oxides	000	N/A	1217.000	1217.000	3	Add	NA
Carbon monoxide	000	N/A	67.372	391.000	3	Add	NA
Total VOC	000	N/A	10.241	10.241	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.003	0.003	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.002	0.002	3	Add	NA
Benzene	000	N/A	0.003	0.003	3	Add	NA
Ethyl benzene	000	N/A	0.001	0.001	3	Add	NA
Formaldehyde	000	N/A	0.445	0.445	3	Add	NA
Hexane	000	N/A	3.413	3.413	3	Add	NA
Toluene	000	N/A	0.084	0.084	3	Add	NA
Xylene (o-)	000	N/A	0.001	0.001	3	Add	NA
Naphthalene	000	N/A	0.015	0.015	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.061	0.061	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C2A(2)

Approximate location of stack or vent

UTM Zone No. 15 16 Horizontal Coordinate 744798 mE Vertical Coordinate 3322073 mN

Descriptive name of the equipment served by this stack or vent

Unit 2 Boiler: Stack A - 100% No. 2 Fuel Oil

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
182,000

Diameter (ft) or stack discharge area (ft²)
13,000 (ft²)

Stack gas exit temperature (Deg F)
261

Stack gas flow at process conditions, not at standard (ft³/min)
612500

Stack gas exit velocity (ft/sec)
76,900

Date of construction / modification
1966

Operating rate (Max) or tank capacity
3,692 MM BTU/hr

Type of fuel used and heat input

Type of fuel
No. 2 Fuel Oil

Heat input (MMBTU/hr)
3692

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb 25 Mar-May 25 Jun-Aug 25 Sep-Nov 25

Normal operating time of this point

days/wk 7

Normal operating rate

3,692 MM BTU/hr

Air Pollutant Specific Information

Fuel	Type of fuel	Heat input (MMBTU/hr)	Operating Characteristics					Normal operating rate	
			Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	days/wk		
Arsenic	000	N/A	0.007	0.007	0.007	0.032	3	Add	NA
Beryllium	000	N/A	0.006	0.006	0.006	0.024	3	Add	NA
Cadmium	000	N/A	0.006	0.006	0.006	0.024	3	Add	NA
Chromium	000	N/A	0.006	0.006	0.006	0.024	3	Add	NA
Chromium VI	000	N/A	0.002	0.002	0.002	0.007	3	Add	NA
Copper	000	N/A	0.011	0.011	0.011	0.049	3	Add	NA
Lead	000	N/A	0.017	0.017	0.017	0.073	3	Add	NA
Manganese	000	N/A	0.011	0.011	0.011	0.049	3	Add	NA
Mercury	000	N/A	0.006	0.006	0.006	0.024	3	Add	NA
Nickel	000	N/A	0.006	0.006	0.006	0.024	3	Add	NA
Selenium	000	N/A	0.028	0.028	0.028	0.121	3	Add	NA
Zinc	000	N/A	0.007	0.007	0.007	0.032	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name: **Energy Louisiana, LLC**
Plant location and name (if any): **Energy Little Gypsy Electrical Gen Montiz, La**
Date of Submittal: **August 2006**

Source ID Number: **C2A(3)**
Descriptive name of the equipment served by this stack or vent: **Unit 2 Boiler: Stack A - 100% No 4 Fuel Oil**
Approximate location of stack or vent:
UTM Zone No. 15 Horizontal Coordinate: **744850 mE**
 16 Vertical Coordinate: **3322060 mN**

Stack and Discharge Physical Characteristics Change: No Yes
Height of stack above grade (ft): **162.000**
Diameter (ft) or stack discharge area (ft²): **13.000 (ft)**
Stack gas exit temperature (Deg F): **261**
Stack gas flow at process conditions, not at standard (ft³/min): **612500**
Stack gas exit velocity (ft/sec): **76.900**
Date of construction / modification: **1966**
Operating rate (Max) or tank capacity: **3,692 MM BTU/hr**

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal operating time of this point	Normal Operating Rate	
	Type of fuel	Heat Input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov			hrs/day
a	No. 4 Fuel Oil	3692	25	25	25	25	24	7	3,692

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate			Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)			
Particulate matter (PM10)	000	N/A	63.100	63.100	276.000	3	Add	NA
Particulate matter (PM2.5)	000	N/A	46.000	46.000	201.000	3	Add	NA
Sulfur dioxide	000	N/A	955.000	955.000	4182.000	3	Add	NA
Nitrogen oxides	000	N/A	1150.000	1150.000	5035.000	3	Add	NA
Carbon monoxide	000	N/A	63.700	391.000	279.000	3	Add	NA
Total VOC	000	N/A	9.700	9.700	42.400	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.003	0.003	0.013	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.002	0.002	0.010	3	Add	NA
Benzene	000	N/A	0.003	0.003	0.012	3	Add	NA
Ethyl benzene	000	N/A	0.001	0.001	0.004	3	Add	NA
Formaldehyde	000	N/A	0.420	0.420	1.840	3	Add	NA
Hexane	000	N/A	3.413	3.413	14.947	3	Add	NA
Toluene	000	N/A	0.079	0.079	0.346	3	Add	NA
Xylene (o-)	000	N/A	0.001	0.001	0.006	3	Add	NA
Naphthalene	000	N/A	0.014	0.014	0.063	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.030	0.030	0.133	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	0.000	3	Add	NA



LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
 Emission Inventory Questionnaire (EIQ)
 for Air Pollutants

Department of Environmental Quality
 Office of Environmental Services
 Permits Division
 P.O. Box 82135
 Baton Rouge, LA 70884-2135
 (225) 765-0219

Company Name
Energy Louisiana, LLC
 Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La
 Date of Submittal
August 2006

Source ID Number
C2A(3)
 Descriptive name of the equipment served by this stack or vent
Unit 2 Boiler: Stack A - 100% No 4 Fuel Oil

Stack and Discharge Physical Characteristics
 No Yes
 Height of stack above grade (ft)
 162,000
 Diameter (ft) or stack discharge area (ft²)
 13,000 (ft)
 Stack gas exit temperature (Deg F)
 261
 Stack gas flow at process conditions, not at standard (ft³/min)
 612,500
 Stack gas exit velocity (ft/sec)
 76,900
 Date of construction / modification
 1966
 Operating rate (Max) or tank capacity
 3,692 MM BTU/hr

Approximate location of stack or vent
 UTM Zone No. 15 16
 Horizontal Coordinate
 744850 mE
 Vertical Coordinate
 3322060 mN

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal Operating Rate
	Type of fuel	Heat Input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	
a	No. 4 Fuel Oil	3692	25	25	25	25	3,692
			25	25	24	7	MM BTU/hr

Air Pollutant Specific Information								
Antimony	000	N/A	0.067	0.067	0.293	3	Add	NA
Arsenic	000	N/A	0.017	0.017	0.074	3	Add	NA
Barium	000	N/A	0.033	0.033	0.143	3	Add	NA
Beryllium	000	N/A	<0.001	<0.001	0.002	3	Add	NA
Cadmium	000	N/A	0.005	0.005	0.022	3	Add	NA
Chromium	000	N/A	0.011	0.011	0.047	3	Add	NA
Chromium VI	000	N/A	0.003	0.003	0.014	3	Add	NA
Cobalt	000	N/A	0.077	0.077	0.336	3	Add	NA
Copper	000	N/A	0.022	0.022	0.098	3	Add	NA
Lead	000	N/A	0.019	0.019	0.094	3	Add	NA
Manganese	000	N/A	0.038	0.038	0.167	3	Add	NA
Mercury	000	N/A	0.001	0.001	0.006	3	Add	NA
Nickel	000	N/A	1.076	1.076	4.700	3	Add	NA
Selenium	000	N/A	0.009	0.009	0.038	3	Add	NA
Zinc	000	N/A	0.370	0.370	1.620	3	Add	NA
Hydrogen chloride	000	N/A	4.542	4.542	19.900	3	Add	NA
Hydrogen fluoride	000	N/A	0.475	0.475	2.080	3	Add	NA

Department of Environmental Quality
Office of Environmental Services
Permits Division
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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name Entergy Louisiana, LLC		Plant location and name (if any) Entergy Little Gypsy Electrical Gen Montiz, La		Date of Submittal August 2006	
Source ID Number C2B(1)		Descriptive name of the equipment served by this stack or vent Unit 2 Boiler: Stack B - Natural Gas Fired		Approximate location of stack or vent UTM Zone No. <input checked="" type="checkbox"/> 15 <input type="checkbox"/> 16 Horizontal Coordinate: 744900 mE Vertical Coordinate: 3322300 mN	
Stack and Discharge Physical Characteristics Change <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Stack gas exit conditions, not at standard conditions, not at standard (ft³/min) 612500		Date of construction / modification 1966	
Height of stack above grade (ft) 182.000		Stack gas exit temperature (Deg F) 261		Operating rate (Max) or tank capacity 4,450 MM BTU/hr	
Diameter (ft) or stack discharge area (ft²) 13.000 (ft ²)		Stack gas flow at process conditions, not at standard (ft³/min) 612500		Normal operating time of this point days/wk: 7 wks/yr: 52	
Operating Characteristics					
Type of fuel used and heat input					
Type of fuel Natural Gas		Heat Input (MMBTU/hr) 4550		Percent of annual throughput of pollutants through this emission point	
Fuel		Average (lbs/hr)		Dec-Feb Mar-May Jun-Aug Sep-Nov	
				25 25 25 25	

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	17.063	17.063	3	Add	NA
Particulate matter (PM2.5)	000	N/A	17.063	17.063	3	Add	NA
Sulfur dioxide	000	N/A	1.342	1.342	3	Add	NA
Nitrogen oxides	000	N/A	1151.400	1151.400	3	Add	NA
Carbon monoxide	000	N/A	187.460	391.000	3	Add	NA
Total VOC	000	N/A	12.267	12.267	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.003	0.003	3	Add	NA
Benzene	000	N/A	0.005	0.005	3	Add	NA
Formaldehyde	000	N/A	0.167	0.167	3	Add	NA
Hexane	000	N/A	4.015	4.015	3	Add	NA
Toluene	000	N/A	0.008	0.008	3	Add	NA
Naphthalene	000	N/A	0.001	0.001	3	Add	NA
Phenanthrene	000	N/A	<0.001	<0.001	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.002	0.002	3	Add	NA
Arsenic	000	N/A	<0.001	<0.001	3	Add	NA
Barium	000	N/A	0.010	0.010	3	Add	NA
Beryllium	000	N/A	<0.001	<0.001	3	Add	NA



LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
 Emission Inventory Questionnaire (EIQ)
 for Air Pollutants

Department of Environmental Quality
 Office of Environmental Services
 Permits Division
 P.O.Box 82135
 Baton Rouge, LA 70884-2135
 (225) 765-0219

Company Name: **Energy Louisiana, LLC**
 Plant location and name (if any): **Energy Little Gypsy Electrical Gen Montiz, La**
 Date of Submittal: **August 2006**

Source ID Number: **C2B(1)**
 Descriptive name of the equipment served by this stack or vent: **Unit 2 Boiler: Stack B - Natural Gas Fired**
 UTM Zone No.: 15 16
 Horizontal Coordinate: 744900 mE
 Vertical Coordinate: 3322300 mN

Stack and Discharge Physical Characteristics: No Yes
 Height of stack above grade (ft): 182,000
 Diameter (ft) or stack discharge area (ft²): 13,000 (ft)
 Stack gas exit temperature (Deg F): 261
 Stack gas flow at process conditions, not at standard (ft³/min): 612500
 Stack gas exit velocity (ft/sec): 76.900
 Date of construction / modification: 1966
 Operating rate (Max) or tank capacity: 4,450 MM BTU/hr

Fuel	Type of fuel used and heat input		Operating Characteristics					Normal Operating Rate	
	Type of fuel	Heat input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day		days/wk
a	Natural Gas	4550	25	25	25	25	24	7	52

Air Pollutant Specific Information

Pollutant	000	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	Normal Operating Rate
Cadmium	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Chromium	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Chromium VI	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Cobalt	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Copper	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Lead	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Manganese	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Mercury	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Nickel	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Selenium	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr
Zinc	N/A	0.002	0.003	0.001	<0.001	0.002	0.001	0.001	0.001	0.003	0.003	0.004	0.001	0.008	0.005	0.004	0.003	0.021	<0.001	0.283	3	25	25	25	24	7	52	4,450 MM BTU/hr

Department of Environmental Quality
Office of Environmental Services
Permits Division
P.O. Box 82135
Baton Rouge, LA 70884-2135
(225) 765-0219

LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C2B(2)

Descriptive name of the equipment served by this stack or vent

Unit 2 Boiler: Stack B - 100% No. 2 Fuel Oil

Approximate location of stack or vent

UTM Zone No. 15 Horizontal Coordinate 744785 mE
 16 Vertical Coordinate 3322077 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
182.000

Diameter (ft) or stack discharge area (ft²)
13.000 (ft)
(ft²)

Stack gas exit temperature (Deg F)
261

Stack gas flow at process conditions, not at standard (ft³/min)
612500

Stack gas exit velocity (ft/sec)
76.900

Date of construction / modification
1966

Operating rate (Max) or tank capacity
3,692 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel
No. 2 Fuel Oil

Heat Input (MMBTU/hr)
3692

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb	25
Mar-May	25
Jun-Aug	25
Sep-Nov	25

Normal operating time of this point

days/wk	7
wks/yr	52

Normal Operating Rate

3,692 MM BTU/hr

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate			Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)			
Particulate matter (PM10)	000	N/A	13.474	13.474	59.018	3	Add	NA
Particulate matter (PM2.5)	000	N/A	3.369	3.369	14.755	3	Add	NA
Sulfur dioxide	000	N/A	957.000	957.000	4190.000	3	Add	NA
Nitrogen oxides	000	N/A	1217.000	1217.000	5329.000	3	Add	NA
Carbon monoxide	000	N/A	67.372	391.000	295.091	3	Add	NA
Total VOC	000	N/A	10.241	10.241	44.854	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.003	0.003	0.014	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.002	0.002	0.010	3	Add	NA
Benzene	000	N/A	0.003	0.003	0.013	3	Add	NA
Ethyl benzene	000	N/A	0.001	0.001	0.004	3	Add	NA
Formaldehyde	000	N/A	0.445	0.445	1.948	3	Add	NA
Hexane	000	N/A	3.413	3.413	14.947	3	Add	NA
Toluene	000	N/A	0.084	0.084	0.366	3	Add	NA
Xylene (o-)	000	N/A	0.001	0.001	0.006	3	Add	NA
Naphthalene	000	N/A	0.015	0.015	0.067	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.061	0.061	0.265	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	0.000	3	Add	NA

Department of Environmental Quality
Office of Environmental Services
Permits Division
P.O. Box 82135
Baton Rouge, LA 70884-2135
(225) 765-0219

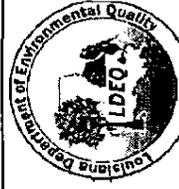
LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name Energy Louisiana, LLC		Plant location and name (if any) Energy Little Gypsy Electrical Gen Montiz, La		Date of Submittal August 2006				
Source ID Number C2B(2)		Descriptive name of the equipment served by this stack or vent Unit 2 Boiler: Stack B - 100% No. 2 Fuel Oil		Approximate location of stack or vent UTM Zone No. <input checked="" type="checkbox"/> 15 <input type="checkbox"/> 16 Horizontal Coordinate 744785 mE Vertical Coordinate 3322077 mN				
Stack and Discharge Physical Characteristics Change <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Height of stack above grade (ft) 182,000	Diameter (ft) or stack discharge area (ft ²) 13,000 (ft) (ft ²)	Stack gas exit temperature (Deg F) 261	Stack gas flow at process conditions, not at standard (ft ³ /min) 612500	Stack gas exit velocity (ft/sec) 76.900	Date of construction / modification 1966	Operating rate (Max) or tank capacity 3,692 MM BTU/hr	
Type of fuel used and heat input			Operating Characteristics					
Type of fuel a No. 2 Fuel Oil		Heat Input (MMBTU/hr) 3692		Percent of annual throughput of pollutants through this emission point Dec-Feb 25 Mar-May 25 Jun-Aug 25 Sep-Nov 25			Normal operating time of this point days/wk 7 wks/yr 52	Normal Operating Rate 3,692 MM BTU/hr
Air Pollutant Specific Information								
Arsenic	000	N/A	0.007	0.007	0.032	3	Add	NA
Beryllium	000	N/A	0.006	0.006	0.024	3	Add	NA
Cadmium	000	N/A	0.006	0.006	0.024	3	Add	NA
Chromium	000	N/A	0.006	0.006	0.024	3	Add	NA
Chromium VI	000	N/A	0.002	0.002	0.007	3	Add	NA
Copper	000	N/A	0.011	0.011	0.049	3	Add	NA
Lead	000	N/A	0.017	0.017	0.073	3	Add	NA
Manganese	000	N/A	0.011	0.011	0.049	3	Add	NA
Mercury	000	N/A	0.006	0.006	0.024	3	Add	NA
Nickel	000	N/A	0.006	0.006	0.024	3	Add	NA
Selenium	000	N/A	0.028	0.028	0.121	3	Add	NA
Zinc	000	N/A	0.007	0.007	0.032	3	Add	NA

Department of Environmental Quality
Office of Environmental Services
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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C2B(3)

Approximate location of stack or vent

UTM Zone No. 15 16

Horizontal Coordinate

744850 mE

Vertical Coordinate

3322060 mN

Stack and Discharge Physical Characteristics
Change No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
13.000 (ft)
(ft²)

Stack gas exit temperature (Deg F)
261

Stack gas flow at process conditions, not at standard (ft³/min)
612500

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1966

Operating rate (Max) or tank capacity
3,692 MM BTU/hr

Type of fuel used and heat input

Type of fuel
a No. 4 Fuel Oil

Heat Input (MMBTU/hr)
3692

Percent of annual throughput of pollutants through this emission point

Dec-Feb 25 Mar-May 25 Jun-Aug 25 Sep-Nov 25

Normal operating time of this point
days/wk 7 wks/yr 52

Normal Operating Rate
3,692 MM BTU/hr

Operating Characteristics

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate			Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)	Annual (tons/yr)			
Particulate matter (PM10)	000	N/A	63.100	63.100	276.000	3	Add	NA
Particulate matter (PM2.5)	000	N/A	46.000	46.000	201.000	3	Add	NA
Sulfur dioxide	000	N/A	955.000	955.000	4182.000	3	Add	NA
Nitrogen oxides	000	N/A	1150.000	1150.000	5035.000	3	Add	NA
Carbon monoxide	000	N/A	63.700	391.000	279.000	3	Add	NA
Total VOC	000	N/A	9.700	9.700	42.400	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.003	0.003	0.013	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.002	0.002	0.010	3	Add	NA
Benzene	000	N/A	0.003	0.003	0.012	3	Add	NA
Ethyl benzene	000	N/A	0.001	0.001	0.004	3	Add	NA
Formaldehyde	000	N/A	0.420	0.420	1.840	3	Add	NA
Hexane	000	N/A	3.413	3.413	14.947	3	Add	NA
Toluene	000	N/A	0.079	0.079	0.346	3	Add	NA
Xylene (o-)	000	N/A	0.001	0.001	0.006	3	Add	NA
Naphthalene	000	N/A	0.014	0.014	0.063	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.030	0.030	0.133	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	0.000	3	Add	NA

Department of Environmental Quality
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(225) 765-0219

LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C2B(3)

Descriptive name of the equipment served by this stack or vent

Unit 2 Boiler: Stack B - 100% No 4 Fuel Oil

Approximate location of stack or vent

UTM Zone No. 15 Horizontal Coordinate
 16 Vertical Coordinate

744850 mE
3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
13.000 (ft)
(ft²)

Stack gas exit temperature (Deg F)
261

Stack gas flow at process conditions, not at standard (ft³/min)
612500

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1966

Operating rate (Max) or tank capacity
3,692 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel
No. 4 Fuel Oil

Heat Input (MMBTU/hr)
3692

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
25	25	25	25

hrs/day
24

days/wk
7

Normal Operating Rate
3,692 MM BTU/hr

Air Pollutant Specific Information

Fuel	Type of fuel	Heat Input (MMBTU/hr)	Operating Characteristics				Normal Operating Rate	
			Dec-Feb	Mar-May	Jun-Aug	Sep-Nov		
Antimony	000	N/A	0.067	0.067	0.293	3	Add	NA
Arsenic	000	N/A	0.017	0.017	0.074	3	Add	NA
Barium	000	N/A	0.033	0.033	0.143	3	Add	NA
Beryllium	000	N/A	<0.001	<0.001	0.002	3	Add	NA
Cadmium	000	N/A	0.005	0.005	0.022	3	Add	NA
Chromium	000	N/A	0.011	0.011	0.047	3	Add	NA
Chromium VI	000	N/A	0.003	0.003	0.014	3	Add	NA
Cobalt	000	N/A	0.077	0.077	0.336	3	Add	NA
Copper	000	N/A	0.022	0.022	0.980	3	Add	NA
Lead	000	N/A	0.019	0.019	0.084	3	Add	NA
Manganese	000	N/A	0.038	0.038	0.167	3	Add	NA
Mercury	000	N/A	0.001	0.001	0.006	3	Add	NA
Nickel	000	N/A	1.076	1.076	4.700	3	Add	NA
Selenium	000	N/A	0.009	0.009	0.038	3	Add	NA
Zinc	000	N/A	0.370	0.370	1.620	3	Add	NA
Hydrogen chloride	000	N/A	4.542	4.542	19.900	3	Add	NA
Hydrogen fluoride	000	N/A	0.475	0.475	2.080	3	Add	NA

Department of Environmental Quality
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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal
August 2006

Source ID Number

C3(1)

Descriptive name of the equipment served by this stack or vent

Unit 3 Boiler - Natural Gas Fired

Approximate location of stack or vent

UTM Zone No. 15 Horizontal Coordinate 744850 mE
 16 Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft²)

Stack gas exit temperature (Deg F)
282

Stack gas flow at process conditions, not at standard (ft³/min)
1471300

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1969

Operating rate (Max) or tank capacity
5,578 MM BTU/hr

Type of fuel used and heat input

Type of fuel
Natural Gas

Heat Input (MMBTU/hr)
5578

Operating Characteristics

Percent of annual throughput of pollutants through this emission point

Dec-Feb	25	25	25	25	25
Mar-May	25	25	25	25	25
Jun-Aug	25	25	25	25	25
Sep-Nov	25	25	25	25	25
hrs/day	24	24	24	24	24
days/wk	7	7	7	7	7
Normal operating time of this point	7	7	7	7	7
Normal Operating Rate	5,578	5,578	5,578	5,578	5,578
MM BTU/hr					

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	41.800	41.800	3	Add	NA
Particulate matter (PM2.5)	000	N/A	41.800	41.800	3	Add	NA
Sulfur dioxide	000	N/A	3.300	3.300	3	Add	NA
Nitrogen oxides	000	N/A	3624.600	4462.000	3	Add	NA
Carbon monoxide	000	N/A	459.600	1826.000	3	Add	NA
Total VOC	000	N/A	30.100	30.100	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.007	0.007	3	Add	NA
Benzene	000	N/A	0.011	0.011	3	Add	NA
Formaldehyde	000	N/A	0.410	0.410	3	Add	NA
Hexane	000	N/A	9.840	9.840	3	Add	NA
Toluene	000	N/A	0.019	0.019	3	Add	NA
Naphthalene	000	N/A	0.003	0.003	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.004	0.004	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	3	Add	NA
Arsenic	000	N/A	0.001	0.001	3	Add	NA
Barium	000	N/A	0.024	0.024	3	Add	NA
Beryllium	000	N/A	0.000	0.000	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montiz, La

Date of Submittal

August 2006

Source ID Number

C3(1)

Descriptive name of the equipment served by this stack or vent

Unit 3 Boiler - Natural Gas Fired

Approximate location of stack or vent

UTM Zone No. 15 16
 Horizontal Coordinate 744850 mE
 Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162,000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft)
(ft²)

Stack gas exit temperature (Deg F)
282

Stack gas flow at process conditions, not at standard (ft³/min)
1471300

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1969

Operating rate (Max) or tank capacity
5,578 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
a Natural Gas	5578

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point				
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr
25	25	25	25	24	7	52

Normal Operating Rate
5,578 MM BTU/hr

Air Pollutant Specific Information

Pollutant	000	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.011	0.000	0.159	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Cadmium	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Chromium	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Chromium VI	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Cobalt	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Copper	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Lead	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Manganese	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Mercury	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Nickel	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Selenium	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr
Zinc	000	N/A	0.006	0.008	0.002	0.001	0.005	0.003	0.002	0.001	0.000	0.159	0.026	0.034	0.010	0.002	0.020	0.012	0.009	0.006	0.050	0.000	0.895	3	3	3	3	3	3	24	7	52	5,578	MM BTU/hr

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C3(2)

Descriptive name of the equipment served by this stack or vent

Unit 3 Boiler - 15% No 2 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent

UTM Zone No. 15 16
Horizontal Coordinate 744850 mE
Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft²)

Stack gas exit temperature (Deg F)
282

Stack gas flow at process conditions, not at standard (ft³/min)
1471300

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1969

Operating rate (Max) or tank capacity
5,328 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
a Natural Gas	5578
b No. 2 Fuel Oil	5328

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point				
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	wks/yr
25	25	25	25	24	7	52

Normal Operating Rate
5,328 MM BTU/hr

Air Pollutant Specific Information

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	41.390	41.840	3	Add	NA
Particulate matter (PM2.5)	000	N/A	37.020	41.840	3	Add	NA
Sulfur dioxide	000	N/A	417.000	2761.000	3	Add	NA
Nitrogen oxides	000	N/A	3608.000	4462.000	3	Add	NA
Carbon monoxide	000	N/A	419.850	1826.000	3	Add	NA
Total VOC	000	N/A	30.000	30.080	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.001	0.009	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.006	0.007	3	Add	NA
Benzene	000	N/A	0.011	0.011	3	Add	NA
Ethyl benzene	000	N/A	0.000	0.002	3	Add	NA
Formaldehyde	000	N/A	0.541	1.283	3	Add	NA
Hexane	000	N/A	8.367	9.844	3	Add	NA
Toluene	000	N/A	0.052	0.241	3	Add	NA
Xylene (o-)	000	N/A	0.001	0.004	3	Add	NA
Naphthalene	000	N/A	0.009	0.044	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.029	0.175	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	3	Add	NA

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LOUISIANA
SINGLE POINT/AREA/VOLUME SOURCE
Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name

Energy Louisiana, LLC

Plant location and name (if any)

Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal

August 2006

Source ID Number

C3(2)

Descriptive name of the equipment served by this stack or vent

Unit 3 Boiler - 15% No 2 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent

UTM Zone No. 15 Horizontal Coordinate 744850 mE
 16 Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics
Change No Yes

Height of stack above grade (ft)
162.000

Diameter (ft) or stack discharge area (ft²)
10.500 (ft)

Stack gas exit temperature (Deg F)
282

Stack gas flow at process conditions, not at standard (ft³/min)
1471300

Stack gas exit velocity (ft/sec)
62.700

Date of construction / modification
1969

Operating rate (Max) or tank capacity
5.328 MM BTU/hr

Fuel

Type of fuel used and heat input

Type of fuel	Heat Input (MMBTU/hr)
Natural Gas	5578
No. 2 Fuel Oil	5328

Operating Characteristics

Percent of annual throughput of pollutants through this emission point		Normal operating time of this point		Normal Operating Rate	
Dec-Feb	Mar-May	Jun-Aug	Sep-Nov		days/wk
25	25	25	25	24	52

Air Pollutant Specific Information

	000	0.004	0.021	0.018	3	Add	NA
Arsenic	000	0.004	0.021	0.018	3	Add	NA
Barium	000	0.020	0.024	0.090	3	Add	NA
Beryllium	000	0.002	0.016	0.011	3	Add	NA
Cadmium	000	0.008	0.016	0.033	3	Add	NA
Chromium	000	0.009	0.016	0.039	3	Add	NA
Chromium VI	000	0.003	0.005	0.012	3	Add	NA
Cobalt	000	0.000	0.000	0.002	3	Add	NA
Copper	000	0.009	0.320	0.038	3	Add	NA
Lead	000	0.010	0.048	0.042	3	Add	NA
Manganese	000	0.007	0.320	0.029	3	Add	NA
Mercury	000	0.004	0.016	0.016	3	Add	NA
Nickel	000	0.012	0.016	0.053	3	Add	NA
Selenium	000	0.012	0.080	0.053	3	Add	NA
Zinc	000	0.138	0.159	0.604	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name: **Energy Louisiana, LLC**
Plant location and name (if any): **Energy Little Gypsy Electrical Gen Montiz, La**
Date of Submittal: **August 2006**

Source ID Number: **C3(3)**
Descriptive name of the equipment served by this stack or vent: **Unit 3 Boiler - 15% No 4 Fuel Oil / 85% Natural Gas**
Approximate location of stack or vent:
UTM Zone No. 15 Horizontal Coordinate: **744850 mE**
 16 Vertical Coordinate: **3322060 mN**

Stack and Discharge Physical Characteristics Change: No Yes
Height of stack above grade (ft): **162,000**
Diameter (ft) or stack discharge area (ft²): **10,500 (ft)**
Stack gas exit temperature (Deg F): **282**
Stack gas flow at process conditions, not at standard (ft³/min): **1471300**
Stack gas exit velocity (ft/sec): **62.700**
Date of construction / modification: **1969**
Operating rate (Max) or tank capacity: **5,328 MM BTU/hr**

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal operating time of this point	Normal Operating Rate	
	Type of fuel	Heat input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov			hrs/day
a	Natural Gas	5578	25	25	25	25	24	7	52
b	No. 4 Fuel Oil	5328							

Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Emission Rate		Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack
			Average (lbs/hr)	Maximum (lbs/hr)			
Particulate matter (PM10)	000	N/A	62.900	182.100	3	Add	NA
Particulate matter (PM2.5)	000	N/A	55.500	132.700	3	Add	NA
Sulfur dioxide	000	N/A	416.200	2755.900	3	Add	NA
Nitrogen oxides	000	N/A	3578.600	4462.000	3	Add	NA
Carbon monoxide	000	N/A	418.200	1826.000	3	Add	NA
Total VOC	000	N/A	29.800	30.100	3	Add	NA
1,1,1-Trichloroethane	000	N/A	0.001	0.009	3	Add	NA
1,4-Dichlorobenzene	000	N/A	0.006	0.007	3	Add	NA
Benzene	000	N/A	0.011	0.011	3	Add	NA
Ethyl benzene	000	N/A	0.000	0.002	3	Add	NA
Formaldehyde	000	N/A	0.531	1.213	3	Add	NA
Hexane	000	N/A	8.367	9.844	3	Add	NA
Toluene	000	N/A	0.050	0.228	3	Add	NA
Xylene (o-)	000	N/A	0.001	0.004	3	Add	NA
Naphthalene	000	N/A	0.009	0.044	3	Add	NA
Polynuclear Aromatic Hydrocarbons	000	N/A	0.016	0.088	3	Add	NA
Total PCDD	000	N/A	0.000	0.000	3	Add	NA

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LOUISIANA

SINGLE POINT/AREA/VOLUME SOURCE

Emission Inventory Questionnaire (EIQ)
for Air Pollutants



Company Name
Energy Louisiana, LLC

Plant location and name (if any)
Energy Little Gypsy Electrical Gen Montz, La

Date of Submittal
August 2006

Source ID Number
C3(3)

Descriptive name of the equipment served by this stack or vent
Unit 3 Boiler - 15% No 4 Fuel Oil / 85% Natural Gas

Approximate location of stack or vent
UTM Zone No. 15 16 Horizontal Coordinate 744850 mE Vertical Coordinate 3322060 mN

Stack and Discharge Physical Characteristics Change
 No Yes

Height of stack above grade (ft) 162,000

Diameter (ft) or stack discharge area (ft²) 10,500 (ft) (ft²)

Stack gas exit temperature (Deg F) 282

Stack gas flow at process conditions, not at standard (ft³/min) 1471300

Stack gas exit velocity (ft/sec) 62,700

Date of construction / modification 1969

Operating rate (Max) or tank capacity 5,328 MM BTU/hr

Fuel	Type of fuel used and heat input		Operating Characteristics				Normal operating time of this point	Normal Operating Rate		
	Type of fuel	Heat input (MMBTU/hr)	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov			days/wk	hrs/day
a	Natural Gas	5578	25	25	25	25	7	24	5,328	MM BTU/hr
b	No. 4 Fuel Oil	5328								

Air Pollutant Specific Information	Percent of annual throughput of pollutants through this emission point									
	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	hrs/day	days/wk	Normal Operating Rate	Operating rate (Max) or tank capacity	Operating rate (Max) or tank capacity	Operating rate (Max) or tank capacity
Antimony	000	N/A	0.029	0.193	0.127	3	Add	NA	NA	NA
Arsenic	000	N/A	0.008	0.049	0.036	3	Add	NA	NA	NA
Barium	000	N/A	0.035	0.094	0.152	3	Add	NA	NA	NA
Beryllium	000	N/A	0.000	0.001	0.001	3	Add	NA	NA	NA
Cadmium	000	N/A	0.007	0.015	0.032	3	Add	NA	NA	NA
Chromium	000	N/A	0.011	0.031	0.049	3	Add	NA	NA	NA
Chromium VI	000	N/A	0.003	0.009	0.014	3	Add	NA	NA	NA
Cobalt	000	N/A	0.034	0.221	0.147	3	Add	NA	NA	NA
Copper	000	N/A	0.014	0.065	0.060	3	Add	NA	NA	NA
Lead	000	N/A	0.011	0.055	0.047	3	Add	NA	NA	NA
Manganese	000	N/A	0.018	0.110	0.080	3	Add	NA	NA	NA
Mercury	000	N/A	0.002	0.004	0.008	3	Add	NA	NA	NA
Nickel	000	N/A	0.476	3.105	2.083	3	Add	NA	NA	NA
Selenium	000	N/A	0.004	0.025	0.017	3	Add	NA	NA	NA
Zinc	000	N/A	0.295	1.069	1.293	3	Add	NA	NA	NA
Hydrogen chloride	000	N/A	1.966	13.109	8.613	3	Add	NA	NA	NA
Hydrogen fluoride	000	N/A	0.206	1.371	0.901	3	Add	NA	NA	NA

Exhibit C

1 asked about this particular document to Mr. Schott, who was knowledgeable
2 about this document, so I would object to counsel asking questions to this
3 particular witness about this document.

4 **MS. REICHERT:** Your Honor, may I --

5 **HEARING EXAMINER MR. ORTEGO:** I'll sustain the objection. You can --
6 you can question the witness as to his knowledge, as to what he knows about the
7 percentage, but to ask him about a statement in a letter from EPA, I'm not going
8 to allow.

9 **MS. REICHERT:** Okay.

10 **EXAMINATION BY MS. REICHERT:**

11 Q. So to your knowledge, this -- a statement that Entergy is planning
12 on using petroleum coke with a typical sulfur content of 8.0 percent is not
13 correct?

14 A. I can testify that this project was designed to use fuel from .5
15 percent to 8 percent fuel. That's what we have designed the facility to do. I
16 cannot verify this statement. I'm not sure if it was taken out of context or how it
17 was used or where it was used, so I can not verify that statement. All I can tell
18 you is that we have designed the facility to be very fuel-flexible and combust and
19 utilize fuels of various sulfur contents, which includes up to 8 percent.

20 Q. Okay. Thank you. Just one moment.

21 If you could refer to page 4 of your direct testimony, lines 21 to 23.
22 When you state that the Company's proposed project can burn a variety of
23 petroleum coke and coals, can you explain exactly what you mean by "variety"?

24 A. As I mentioned before, petroleum coke has a lot of variability in
25 the industry. We are in an excellent location to receive petroleum coke for

1 various refineries up and down the Mississippi River and the intracostal
2 waterway, as well as from overseas. We have a good location for overseas
3 shipping of fuels into the site. So the variety opens up to the world, basically
4 within the sulfur contents and other constituents in a range that we designed this
5 facility to burn.

6 Q. Okay. So by "variety," you mean various locations that you can
7 receive as well as a variety of sulfur content for the petroleum coke; is that
8 correct?

9 A. Basically, yes. Let me state also that we are primarily a
10 bituminous coal, so it has to fall within the ranks of bituminous coal that we have
11 stated in direct testimony.

12 Q. Can I follow up with that? In terms of variety then of bituminous
13 coal, can you explain what you mean by variety in that context?

14 A. There's different sources of bituminous coal that's available.
15 Primarily, we have used the Illinois Basin as a typical to try to define what a
16 typical fuel would be for this unit. We have done that so that we can identify it
17 with some certainty what the unit would be designed to do, so manufacturers can
18 design towards that basis. But a CFB is extremely flexible in the type of fuels it
19 can burn, so that flexibility is of extreme value for this project.

20 Q. Do you have any idea of what other areas that you anticipate being
21 able to get coal from, other than the Illinois Basin?

22 A. That's a Fuel's question. There are other individuals in the
23 Company that have far greater expertise in that area than I to answer that
24 question.

25 Q. One reason that the Little Gypsy location was chosen was because

Exhibit D

**BEFORE THE
LOUISIANA PUBLIC SERVICE COMMISSION**

EX PARTE:)
APPLICATION OF)
ENERGY LOUISIANA, LLC)
FOR APPROVAL TO REPOWER)
THE LITTLE GYPSY UNIT 3)
ELECTRIC GENERATING FACILITY)
AND FOR AUTHORITY)
TO COMMENCE)
CONSTRUCTION AND FOR)
CERTAIN COST PROTECTION AND)
COST RECOVERY)

DOCKET NO. U-_____

**DIRECT TESTIMONY
OF
JEFFREY L. HEIDINGSFELDER
ON BEHALF OF
ENERGY LOUISIANA, LLC**

JULY 2007

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1 Q. PLEASE SUMMARIZE THE TECHNOLOGICAL ADVANTAGES OF USING
2 CFB BOILERS IN THIS REPOWERING PROJECT.

3 A. CFB boilers represent a proven technology that can burn virtually any carbon-
4 based solid fuel efficiently, including all grades of coal, high-ash waste coals,
5 petroleum coke, and bio-mass. The CFB can also accommodate a broad range of
6 sulfur contents, from 0.5 to 8%. The CFB provides the optionality to burn less
7 expensive high sulfur coal or petroleum coke which is a by-product of the oil
8 refining industry in a clean manner, meeting stringent environmental permit
9 requirements.

10

11 **III. SELECTION OF THE LITTLE GYPSY 3 SITE FOR THE**
12 **REPOWERING PROJECT**
13

14 Q HOW WAS LITTLE GYPSY 3 SELECTED FOR THIS PROJECT?

15 A. As I discussed above, a technology of choice for the addition of new solid-fueled
16 capacity was a CFB. In addition, as discussed in more detail in the Direct
17 Testimony of Company witness Anthony P. Walz, the System had determined
18 that it would be beneficial to site new solid-fuel generation within the Amite
19 South region of the Entergy System. Amite South is generally described as the
20 region in Southeast Louisiana that is south of the Amite Substation (generally
21 from east of the Baton Rouge, Louisiana metropolitan area to the Mississippi state
22 line and south to the Gulf of Mexico). Given those two desires (*e.g.*, a site located
23 in Amite South suitable for a CFB-based solid fuel project), the factors that were
24 considered in evaluating alternative locations included:



LAW SCHOOL

Environmental Law Clinic

March 31, 2008

ref: 126-017

Stephen Johnson, Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave., NW
Mail Code 1101A
Washington, DC 20460

Re: *Response to Entergy Louisiana, LLC's 2/14/08 Letter to EPA Administrator regarding Petition Requesting EPA to Object to Title V Permit (2520-00009-V1) and Prevention of Significant Deterioration Permit (PSD-LA-720) Issued to Entergy by Louisiana Department of Environmental Quality on Nov. 30, 2007*

Dear Administrator Johnson:

Petitioners Sierra Club, Louisiana Environmental Action Network, Gulf Restoration Network, Alliance for Affordable Energy, and Sal Giardina, Jr. respectfully submit their response to Entergy Louisiana, LLC's February 14, 2008 letter (signed by Chuck Barlow, Assistant General Counsel for Entergy Systems, Inc.). Entergy's letter concerns the Petitioners' January 9, 2008 request that EPA object to Title V permits for Entergy Louisiana, LLC's Little Gypsy Unit 3 Solid Fuel Repowering Project.

Introduction

Entergy's letter asks EPA to depart from the general principle of administrative law that '[s]o long as the appellant or some other party has put an objection on the record, the obligation to exhaust [administrative remedies] is discharged.' *Safir v. Kreps*, 551 F.2d 447, 452 (D.C. Cir.), *cert. denied*, 434 U.S. 820 (1977). Specifically, Entergy erroneously asserts that the Petitioners cannot base a Clean Air Act § 505 petition on issues that EPA and the U.S. Fish & Wildlife Service raised in comments they submitted to the Louisiana Department of Environmental Quality (LDEQ). Instead, Entergy asserts that an unwritten rule required the Petitioners to submit separate comments to repeat concerns that EPA and the U.S. Fish & Wildlife Service had already raised. Entergy's assertions contradict the plain language of the Clean Air Act and an EPA Order. Entergy's assertions are also inconsistent with case law.

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Analysis

I. **Section 505(b) allows “any person” to submit a petition based on any objections that “were raised . . . during the comment period”; there is *no* requirement that Petitioners repeat concerns that EPA or others raised.**

Clean Air Act § 505 does not condition the public’s right to petition EPA on participation in the state permitting process. 42 U.S.C. § 7661d(b)(2). Instead, it allows “any person” to submit a petition based on issues that the state agency was alerted to during the public comment period. The Act does this by using the passive voice to require that petitions be based on issues that “were raised . . . during the public comment” without stating that any particular person must have raised those issues. 42 U.S.C. § 7661d(b)(2). EPA has recognized this fact, explaining:

In determining whether the Petitioner has properly raised an issue in a petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), EPA first evaluates whether the petition was based on objections/comments that were raised with reasonable specificity *by any parties* during the public comment period.

EPA, Order Granting in Part and Denying in Part Petition for Objection to Permit, In the Matter of G-P Gypsum Corp. Assoc. Facility, Pet. No.: II-2005-05 (April 4, 2006) (http://www.epa.gov/Region7/programs/artd/air/title5/petitiondb/petitions/gp_gypsum_decision2005.pdf) at 4 (emphasis added).

Here, Petitioners based their Petition on objections and comments that EPA and the U.S. Fish & Wildlife Service raised during the public comment period.

II. **Case law establishes that the relevant issue is whether the permitting agency (LDEQ) had an opportunity to consider the pertinent comments, not the identity of the party who raised the comments.**

In applying the doctrine of exhaustion of administrative remedies, courts recognize that “in fairness” they should *not* dismiss for failure to exhaust remedies when the agency “actually did consider the issue raised by the [petitioner] in its petition for review.” Ohio v. EPA, 838 F.2d 1325, 1329 (D.C. Cir. 1988) (citations and internal quotation marks omitted). In other words, “[s]o long as the appellant *or some other party* has put an objection on the record, the obligation to exhaust is discharged.” Safir v. Kreps, 551 F.2d 447, 452 (D.C. Cir.), cert. denied, 434 U.S. 820 (1977).

Thus, for example, the D.C. Circuit considered NRDC’s petition for judicial review of a final EPA rule even when NRDC did not participate in the rulemaking. Natural Res. Def. Council, Inc. v. EPA, 824 F.2d 1146, 1150-52 (D.C. Cir. 1987). The court explained:

The NRDC did not participate in the rulemaking proceedings in this case, but argues that we should not dismiss its petition for review because the agency in fact considered the statutory issue raised in the petition. The NRDC is correct. This court has excused the exhaustion requirements for a particular issue when the agency has in fact considered the issue. . . . Thus, *courts have waived exhaustion*

if the agency “has had an opportunity to consider the identical issues [presented to the court] ... but which were raised by other parties,” . . . , or if the agency’s decision, or a dissenting opinion, indicates that the agency had “the opportunity to consider” “the very argument pressed” by the petitioner on judicial review. . . .

Id. at 1150-51 (citations omitted; emphasis added); see also, e.g., Office of Commc’n of United Church of Christ v. FCC, 465 F.2d 519, 523 (D.C. Cir. 1972) (“It would be blindly ignoring the realities of administrative decision-making to say that the majority had no opportunity to consider the objections raised by the dissenters . . .”).

In an analogous case, the Fifth Circuit allowed a petitioner that had not participated in the agency proceeding to appeal an agency decision. Am. Forest and Paper Assoc. v. EPA, 137 F.3d 291 (5th Cir. 1998). The Fifth Circuit explained that “the statute allows ‘any interested person’ that promptly files an objection to seek review in this court.” Id. at 295. Further, because another party had filed comments on the appeal issues, the court said “the agency cannot reasonably claim that it has been denied the opportunity to consider the issue.” Id. at 296. The Fifth Circuit recently declined to follow its decision in Am. Forest and Paper, but only to the extent of holding that “only in exceptional circumstances should a court review for the first time on appeal a particular challenge to the EPA’s approval of a state implementation plan that *was not raised* during the agency proceedings.” BCCA Appeal Group v. EPA, 355 F.3d 817, 828-29 (5th Cir. 2004). The BCCA decision neither discusses nor departs from the general rule of administrative law that where an agency “has had an opportunity to consider the identical issues in this case but which were raised by other parties . . . it was not necessary for [the petitioner] to raise them again” See Buckeye Cablevision, Inc. v. U.S., 438 F.2d 948, 951 (6th Cir. 1971).

Therefore, Entergy’s letter misses the mark. The issue here is not *who* raised the issues on which Petitioners base their claims, but whether LDEQ had the opportunity to address the issues in the Petition during its review of the Permits. It is undisputed that LDEQ addressed the issues Petitioners has raised during the administrative proceeding.

III. EPA’s failure to object during its 45-day review period does not limit the Petitioners’ right to seek an objection.

Clean Air Act § 505 states that “[i]f the Administrator does not object in writing to the issuance of the [Title V air] permit, any person may petition the Administrator . . . to take such action. 42 U.S.C. § 7661d(b)(2). Entergy stands this provision on its head, arguing that because EPA already provided comments, received responses, “had knowledge of USFW’s comments,” and decided not to object to the Permits, Petitioners are somehow “twisting the process” by asking EPA to object now. Entergy Letter, p. 2. What Entergy fails to discuss is that the Act only allows Petitioners to ask EPA to object to a permit if EPA has not already objected during the 45-day period. Further, while one might argue that EPA had “enforcement discretion” to withhold an objection during its 45-day review period (since an objection follows an arguably non-mandatory determination of noncompliance), EPA clearly “does not have discretion whether to object to draft permits once noncompliance has been demonstrated” in a § 505 petition. N.Y. Pub. Interest Research Group v. Whitman, 321 F.3d 316, 334 (2d Cir. 2003).

IV. Entergy's argument depends on an unjustified assumption based on regulatory language that does not purport to overturn the general rule that '[s]o long as the appellant or some other party has put an objection on the record, the obligation to exhaust is discharged.' Safir, 551 F.2d at 452.

Entergy makes an attenuated argument based on 40 C.F.R. 70.7(h)(5), which requires states to "keep a record of the commenters and also of the issues raised during the public participation process so that the Administrator may fulfill his obligation under [42 U.S.C. § 7661d(b)(2)] to determine whether a citizen petition may be granted." Entergy argues that this regulation somehow implies that the petitioner and the person who raised the pertinent issue during the comment period must be one and the same. The argument is "as silly as it sounds." Cf. Public Citizen v. Steed, 733 F.2d 93, 102 (D.C. Cir. 1984).

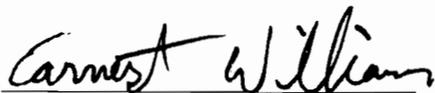
It is black letter law that "[w]hen a regulation implements a statute, the regulation must be construed in light of the statute." U.S. v. Marte, 356 F.3d 1336, 1341 (11th Cir. 2004); Hodgson v. Behrens Drug Co., 475 F.2d 1041, 1047 (5th Cir.1973). Here, the statute does not limit Petitioners' right to object based on comments raised by other parties. A regulation requiring states to keep track of commenters cannot and does not prohibit Petitioners from relying on comments that others made. EPA has any number of reasons to require states to "keep a record of the commenters and also of the issues raised during the public participation process," but restricting 42 U.S.C. § 7661d(b)(2) to a prescribed class that conflicts with the statute's wording cannot be one of them.

Likewise, Entergy's assertion that a private party's environmental handbook could somehow create a new restriction on the § 7661d(b)(2) objection process is without merit.

Conclusion

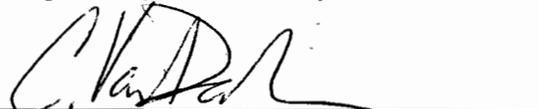
For all of the foregoing reasons, Entergy's arguments its February 14, 2008 letter are without merit.

Primarily prepared by:



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Stephen Johnson, Administrator
U.S. Environmental Protection Agency
March 31, 2008
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