Worksheet for Technical Review of Working Draft of Proposed Permit

Company Name:	CLECO Evangeline LLC	**AI #:**	1906	**TEMPO Activity No:**	PER20030001&4, 20070003
Facility Name:	Evangeline Power Station	**Remarks Submitted by:**	**Robert Knott**		
Permit Writer:	**Rusty J. Jack**	**Permit Writer Email address:**	**Rusty.jack@la.gov**		

Instructions

Permit Reference – Indicate specific portion(s) of the permit to which the remark relates (i.e. "Specific Condition 120", or "Section II Air Permit Briefing Sheet", etc.).

Remarks – Explain the basis for each remark. Provide regulatory citations where possible. If the remark is made due to an error or omission in the permit application this must be noted and the revised information ***must be submitted.*** Revised information may be submitted separately from this worksheet. Please be aware that revised information must be submitted in writing and certified by the Responsible Official, and if necessary, by a Professional Engineer licensed in Louisiana. *Please Note:* New or additional equipment, processes or operating conditions not addressed in the original permit application will be addressed on a case-by-case basis. The Department reserves the right to address such changes in a separate permit action.

DEQ Response – ***DO NOT COMPLETE THIS SECTION.*** This section will be completed by Air Permits Division of DEQ, included in the proposed permit package and made available for public review during the public comment period.

- Additional rows may be added as necessary.
- Completed Form shall be emailed to the Permit writer in MS Word compatible format within the deadline specified in the email notification.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Part 70 Permit, Air Permit Briefing Sheet – Section I (Background)	Current Part 70 Operating Permit is 0920-000020-V2	The change has been made.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Part 70 Permit, Air Permit Briefing Sheet – Section III (Description)	CLECO operates three (3) gas-fired combustion turbines and Heat Recovery Steam Generators (HRSGs) with duct burners at their Evangeline Power Station. Fossil fuels were previously fired in Units 6 and 7 boilers (as well as the existing Unit 5 boiler/steam turbine that had not operated during a 10-year period). Units 6, 7-1 and 7-2 HRSGs each contain duct burners for supplemental firing capability. The HRSGs produce steam to power the existing Units 6 and 7 steam turbines. The steam generated from the Unit6 HRSG is used to power the existing Unit 6 steam turbine. The steam generated from the Unit 7-1 and 7-2 HRSGs is used to power the existing Unit 7 steam turbine. The combustion turbines also have the ability to operate in simple-cycle mode in the event that a malfunction occurs with the steam system or HRSGs.	The change has been made.
Part 70 Permit, Air Permit Briefing Sheet – Section III (Description)	**Estimated emissions in tons per year** 1. SO2 tons before was 28.10. The tons after should be 28.18 due to the .08 tons addition from EQT 0009. 2. NOx tons before was 1304.5. The tons after should be 1305.14 due to the .64 tons addition from EQT 0009. 3. VOC tons after should be 101.19 due to the .09 tons addition from EQT 0009.	The emission estimates have been updated to reflect facility-wide totals.
Part 70 Permit, Air Permit Briefing Sheet – Section IV (Type of Review)	**Type of Review** The statement referring to Group 2 fossil fuels in the 2nd paragraph should be removed due to Evangeline only combusting Group 1 fossil fuels?	The change has been made.
Part 70 Permit, Air Permit Briefing Sheet – Section IX (Insignificant Acitivities)	**Insignificant Activities** ID No. 04 should list (5) tanks as listed in the December 7, 2006 additional information revision.	The change has been made.
Part 70 Permit, Air Permit Briefing Sheet – Section X (Table 1)	The table needs to reflect that ID No. EQT 09 is subject to Subpart IIII. Chapter 15 shows to not apply in Table 2.	The change has been made.
Part 70 Permit, Air Permit Briefing Sheet – Section XI (Table 2)	**Comprehensive Toxic Air Pollutant Emission Control Program** The statement referring to Group 2 fossil fuels should be removed due to Evangeline only combusting Group 1 fossil fuels?	The change has been made.
Part 70 Permit, Air Permit Briefing Sheet – Section XI (Table 2)	**Standards of Performance for Stationary Gas Turbine** 1. Remove and SO2 from the 1st sentence. 2. Add Per 40 CFR 60.334(h)(3), Evangeline Power Station is exempt from monitoring the total sulfur content of the fuel as long as the natural gas that is fired meets the definition of natural gas in 60.331(u).	1. The change has been made. 2. Section IV (Periodic Monitoring) of the Air Statement of Basis has been updated to include discussion regarding this monitoring exemption for the turbines.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Part 70 Permit, General Information	**Related People** 1. Change Darren Olagues to William K. Johnson. William was recently promoted to Vice President, taking Darren Olagues position over Cleco Midstream Resources. 2. Change Russ Snyder to Joe Sepulvado. 3. Remove Charlie Vanhoof.	The changes have been made.
Emission Rates for Criteria Pollutants	**EQT 0002, EQT 0003, EQT 0004** As discussed with the permit writer, the Max lb/hr emissions need to be changed to the emissions listed in the application EIQ sheets. These emissions are listed in Appendix A to the application for these sources.	The changes have been made.
Emission Rates for Criteria Pollutants	**SCN 0001, SCN 0002, SCN 0003** As discussed with the Permit Writer, the emission rates for the SU/SD for these sources will be determined in the near future. Per discussion with LDEQ, the facility's PSD permit will need to undergo a minor modification to include SU/SD emissions and BACT. The minor modification provisions will need to be incorporated into the Title V permit before the permit is public noticed and issued.	The modifications have been made.
Emission Rates for Criteria Pollutants	**EQT 0007 (7-2(2)-98)** NOx Avg lb/hr should be 16.6 lb/hr as indicated in the EIQ.	The change has been made.
Emission Rates for Criteria Pollutants	**GRP 0003 (CT-DB CAP)** NOx Tons/Year cap should be 1304.5 tons/year as per PSD-LA-635 (M-1).	The change has been made.
Emission Rates for Criteria Pollutants	**GRP 0003 (CT-DB CAP)** NOx Tons/Year cap should be 1304.5 tons/year as per PSD-LA-635 (M-1).	Duplicate comment.
Specific Requirements	**EQT 0009 (01-09 Fire Pump Diesel Engine)** 76. The emissions should be listed as .60 g/HP-hr and (.80 g.KW-hr). This is for 100< HP > 300 for 2009 and earlier engines. The SR is listing the g/KW-hr value for the g/HP-hr and vice versus. 77. The emissions should be listed as 7.8 g/HP-hr and (10.5 g.KW-hr). This is for 100< HP > 300 for 2009 and earlier engines. The SR is listing the g/KW-hr value for the g/HP-hr and vice versus. 78. The emissions should be listed as 3.7 g/HP-hr and (5.0 g.KW-hr). This is for 100< HP > 300 for 2009 and earlier engines. The SR is listing the g/KW-hr value for the g/HP-hr and vice versus.	The change has been made.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Statement of Basis, Facility and Current Permit Status (Section II)	CLECO operates three (3) gas-fired combustion turbines and Heat Recovery Steam Generators (HRSGs) with duct burners at their Evangeline Power Station. Fossil fuels were previously fired in Units 6 and 7 boilers (as well as the existing Unit 5 boiler/steam turbine that had not operated during a 10-year period). Units 6, 7-1 and 7-2 HRSGs each contain duct burners for supplemental firing capability. The HRSGs produce steam to power the existing Units 6 and 7 steam turbines. The steam generated from the Unit6 HRSG is used to power the existing Unit 6 steam turbine. The steam generated from the Unit 7-1 and 7-2 HRSGs is used to power the existing Unit 7 steam turbine. The combustion turbines also have the ability to operate in simple-cycle mode in the event that a malfunction occurs with the steam system or HRSGs.	The change has been made.
Statement of Basis, Proposed Project/Permit Information (Section III)	Will the Acid Rain Permit No. stay the same as the existing permit number? 0920-00002-IV1	No. The proposed Acid Rain permit number has been corrected.
Statement of Basis, Proposed Project/Permit Information (Section III)	**Permitted Air Emissions** 1. SO2 tons before was 28.10. The tons after should be 28.18 due to the .08 tons addition from EQT 0009. 2. NOx tons before was 1304.5. The tons after should be 1305.14 due to the .64 tons addition from EQT 0009. 3. VOC tons after should be 101.19 due to the .09 tons addition from EQT 0009.	The changes have been made.
Statement of Basis, Regulatory Analysis (Section IV)	**General Condition XVII Activities** 1. This section mentions for a list of General Condition XVII Activities, refer to Section VIII. There is no Section VIII in the Statement of Basis.	The Statement of Basis refers to the proposed Title V permit as follows: *"For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit."*
	May 15, 2009 Comments	
Specific Requirements (Unit 7-1 and 7-2 Duct Burners)	**EQT 0006 and EQT 0007 (SR 26,27 and 40,41)** This requirement is for a unit that is not yet operating. Initial performance test have already been submitted with the initial performance test.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (Unit 7-1 and 7-2 Duct Burners)	**EQT 0006 and EQT 0007 (SR 28 and 42)** When does the 12 month avg annual capacity factor start? The duct burners operate infrequent and capacity will have to be calculated using fuel flow due to no megawatt reading output for the duct burner.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.

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Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirements (Unit 7-1 and 7-2 Duct Burners)	**EQT 0006 and EQT 0007 (SR 29 - 31 and 43 - 45)** The emissions from these sources are measured out of the stack to include both CT and Duct Burner emissions. The emissions are not separated to list the contribution from the duct burner to report excess emission or report emission rates. Maintaining the lb/hr emission limit will demonstrate that the Subpart Db emission rate (.20 lb/mmbtu) is in compliance when both the CT and duct burner are operating.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0006)	**40CFR 60.48Da, 40CFR 60.49Da(f) (1)** A boiler operating day is defined as a 24 hr operating period where fuel is combusted for the entire 24 hr period. The duct burners are used for supplemental firing and will not be operated for a 24 hr period. How will these requirements be met if we will not have boiler operating day? These requirements are not applicable.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0006)	**40CFR 60.50Da and 40CFR 60.51Da** A boiler operating day is defined as a 24 hr operating period where fuel is combusted for the entire 24 hr period. The duct burners are used for supplemental firing and will not be operated for a 24 hr period. How will these requirements be met if we will not have boiler operating day? These requirements are not applicable.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0006)	**40CFR 60.51Da(i)** The facility is exempt from opacity monitoring requirements as per 40 CFR 75.14 (c). This regulation requires quarterly reports for opacity excess. This should be removed from the specific requirements.	The change will not be made. 40 CFR 75.14(c) does not exempt the facility from submitting quarterly excess opacity reports under 40 CR 60.51.Da(i).
Specific Requirements (GRP 0002)	**TRB – Gas Turbines (SR 90)** As per 40 CFR 60.334(h)(3), Evangeline Power Station is exempt from monitoring the total sulfur content of the fuel as long as the natural gas that is fired meets the definition of natural gas in 60.331(u). **TRB – Gas Turbines (SR 91)** Should be removed as per Table 2 page 8 for Subpart GG. List that CEMS will ensure compliance with both monitoring provisions of Part 75 and Subpart GG.	1. No change will be made. The requirement refers to this exemption. 2. The requirement will not be removed. A statement clarifying that the NO_x CEMS required by 40 CFR 75 will be used to comply with the fuel monitoring provisions of Subpart GG has been added to the requirement.
Specific Requirements (EQT 0002) **NOTE: This was probably for GRP 0002**	**TRB – Gas Turbines (SR 93)** This should be removed. These units fire only natural gas and no emergency fuel will be fired. **TRB – Gas Turbines (SR 96)** Chapter 15 is listed as being applicable in Table 1but shows that it does not apply in Table 2. This requirement should be removed as well as Table 1 applicability.	1. The requirement has been removed. 2. The turbines are exempt from continuous emissions monitoring for SO_2 under Chapter 15, but must still maintain annual recordkeeping to verify potential SO_2 emissions.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirements (UNF 0001)	**Facility Wide – Evangeline Power Station (SR 123)** Comply with requirements of PSD-LA-635 (M-1) needs to be changed to PSD-LA-635 (M-2).	The change has been made.
	May 28, 2009 Comments	
Part 70 Permit, Air Permit Briefing Sheet – (Cover page for the Permit Briefing Sheet)	1. Change Darren Olagues to William K. Johnson. William was recently promoted to Vice President, taking Darren Olagues position over Cleco Midstream Resources. 2. Should the Activity No. PER20030001 be changed as listed in the PSD to PER20090001. (this seems to be different in the entire permit)	1. The change has been made. 2. No. The activity number is correct.
Part 70 Permit, Air Permit Briefing Sheet – Section III (Description)	**Estimated emissions in tons per year** 4. SO2 tons before was 28.10. The tons after should be 28.18 due to the .08 tons addition from EQT 0009. 5. VOC tons after should be 101.46 due to the .12, .09 and .15 tons addition from EQT 0005, EQT 0009 and FUG 0001.	1. The facility-wide total SO_2 emissions are 28.16 per year as reported on the Emission Inventory Questionnaire (EIQ) sheets and verified by LDEQ. 2. The change has been made.
Part 70 Permit, Air Permit Briefing Sheet – Section X (Table 1)	Chapter 15 is listed as being applicable in Table 1but shows that it does not apply in Table 2. This requirement should be removed as well as Table 1 applicability.	The change will not be made. EPS is required to maintain records to verify exemption from Chapter 15.
Part 70 Permit, Air Permit Briefing Sheet – Section XI (Table 2)	**Standards of Performance for Stationary Gas Turbine** Add Per 40 CFR 60.334(h)(3), Evangeline Power Station is exempt from monitoring the total sulfur content of the fuel as long as the natural gas that is fired meets the definition of natural gas in 60.331(u).	Section IV (Periodic Monitoring) of the Air Statement of Basis has been updated to include discussion regarding this monitoring exemption for the turbines.
Part 70 Permit, General Information	**Related People** 1. The phone #'s for William K. Johnson are 318-484-7727 (WP) and 318-484-7685 (WF). 2. Should the Activity No. PER20030001 be changed as listed in the PSD to PER20090001.	1. The change has been made. 2. No. The activity number is correct.
Emission Rates For Criteria Polluants	Change the CO Max lb/hr from 1255 to 1225 lb/hr.	The change has been made.
Statement of Basis, Proposed Project/Permit Information (Section III)	**Permitted Air Emissions** 1. SO2 tons before was 28.10. The tons after should be 28.18 due to the .08 tons addition from EQT 0009. 2. VOC tons after should be 101.46 due to the .12, .09 and .15 tons addition from EQT 0005, EQT 0009 and FUG 0001.	1. The facility-wide total SO_2 emissions are 28.16 per year as reported on the Emission Inventory Questionnaire (EIQ) sheets and verified by LDEQ. 2. The change has been made.
Specific Requirements (Unit 7-1 and 7-2 Duct Burners)	**EQT 0006 and EQT 0007 (SR 26,27 and 40,41)** This requirement is for a unit that is not yet operating. Initial performance test have already been submitted with the initial performance test.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirements (Unit 7-1 and 7-2 Duct Burners)	**EQT 0006 and EQT 0007 (SR 28 and 42)** The duct burners operate infrequent and only for a couple of hours when operated. Could this be removed and replaced with recording monthly hours of operation?	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (Unit 7-1 and 7-2 Duct Burners)	**EQT 0006 and EQT 0007 (SR 29 - 31 and 43 - 45)** The emissions from these sources are measured out of the stack to include both CT and Duct Burner emissions. The emissions are not separated to list the contribution from the duct burner to report excess emission or report emission rates. Maintaining the CT lb/hr emission limit will demonstrate that the Subpart Db emission rate (.20 lb/mmbtu) is in compliance when both the CT and duct burner are operating.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0008)	**Specific Requirement 54** This facility does [not] operated or contain a FGD system. This requirement should be removed from the specific requirements.	The requirement has been removed.
Specific Requirements (EQT 0008)	**40CFR 60.48Da (c,e,f,g) 40CFR 60.49Da(f) (1)** A boiler operating day is defined as a 24 hr operating period where fuel is combusted for the entire 24 hr period. The duct burners are used for supplemental firing and will not be operated for a 24 hr period. How will these requirements be met if we will not have boiler operating day? These requirements are not applicable.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0008)	**40CFR 60.49Da(s)** This monitoring systems have already been certified and the monitoring plan has been submitted prior to initial certification. This should be removed.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0008)	**40CFR 60.50Da(b,c,d)** The measurement of these parameters are the outlet of the stack. The measurement will be for both CT emissions and DB emissions.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0008)	**40CFR 60.51Da(a)** A boiler operating day is defined as a 24 hr operating period where fuel is combusted for the entire 24 hr period. The duct burners are used for supplemental firing and will not be operated for a 24 hr period. How will these requirements be met if we will not have boiler operating day? These requirements are not applicable due to not being able to conduct a performance test.	Please contact the U.S. Environmental Protection Agency for guidance on this issue.
Specific Requirements (EQT 0008)	**40CFR 60.51Da (b,c)** The emissions will be a measurement of the CT and DB. The emissions will not be separated between the CT and DB. How will these requirements be met if the emissions can not be obtained?	Please contact the U.S. Environmental Protection Agency for guidance on this issue.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirements (EQT 0008)	**40CFR 60.51Da (f, h)** F and D should be removed due to CRG 0001 being applicable to Acid Rain Requirements. The emissions will be measured at the outlet of the stack to include both CT and DB emissions. The emissions monitoring system will be operated per 40 CFR 75 to ensure compliance of the permitted limits.	40 CFR 60.51Da(d) cannot be removed because it requires Evangeline to submit a signed statement when conditions interrupt proper operation of the control system. Under Subpart Da, the duct burners are required to monitor O_2 and CO_2 as well as NO_x. This makes up the "control system." The provisions of Acid Rain only require a continuous emissions monitor for NO_x. Thus, it would not be able to cover the entire control system under Subpart Da. 40 CFR 60.51Da(f) will not be removed because 40 CR 75 does not address changes made to the operation of the emission control system during periods of data unavailability.
Specific Requirements (EQT 0008)	**40CFR 60.51Da(i)** The facility is exempt from opacity monitoring requirements as per 40 CFR 75.14 (c). This regulation requires quarterly reports for opacity excess. This should be removed from the specific requirements.	The change will not be made. 40 CFR 75.14(c) does not exempt the facility from submitting quarterly excess opacity reports under 40 CR 60.51.Da(i).
Specific Requirements (GRP 0002)	**TRB – Gas Turbines (SR 88)** Regulation needs to be changed from 40 CFR 60.332 (a)(2) to 40 CFR 60.332 (a)(1).	The change has been made.
Specific Requirements (GRP 0002)	**TRB – Gas Turbines (SR 90)** As per 40 CFR 60.334(h)(3), Evangeline Power Station is exempt from monitoring the total sulfur content of the fuel as long as the natural gas that is fired meets the definition of natural gas in 60.331(u). **TRB – Gas Turbines (SR 91)** Should be removed as per Table 2 page 8 for Subpart GG. List that CEMS will ensure compliance with both monitoring provisions of Part 75 and Subpart GG.	1. No change will be made. The requirement refers to this exemption. 2. The requirement will not be removed. A statement clarifying that the NO_x CEMS required by 40 CFR 75 will be used to comply with the fuel monitoring provisions of Subpart GG has been added to the requirement.
Specific Requirements (GRP 0002)	**TRB – Gas Turbines (SR 93)** This should be removed. These units fire only natural gas and no emergency fuel will be fired. **TRB – Gas Turbines (SR 96)** Chapter 15 is listed as being applicable in Table 1but shows that it does not apply in Table 2. This requirement should be removed as well as Table 1 applicability.	1. The change has been made. 2. The change will not be made. EPS is required to maintain records to verify exemption from Chapter 15 for the gas turbines.
Specific Requirements (GRP 0003)	**CT-DB CAP - Turbines and Duct Burners (SR 98)** The listed NOx tons/yr 1304.70 needs to be changed to 1304.5 as listed in CT-DB Cap for NOx in the emission rates for criteria pollutants. **CT-DB CAP - Turbines and Duct Burners (SR 109, 110, 111)** Change the PSD-LA-635 (M-1) to PSD-LA-635 (M-2).	The changes have been made.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirements (SCN 0001 – 0003)	Periods of start-up and shutdown (defined as less than 70% combustion turbine load)	The requirements have been updated according to the most recent BACT analysis submitted by CLECO.
PSD (Cover Pages)	Change the PSD-LA-635 (M-1) to PSD-LA-635 (M-2).	The change has been made.
PSD (Briefing Sheet)	**Project Description (Estimated Emissions)** 1. SO2 tons before was 28.10. The tons after should be 28.18 due to the .08 tons addition from EQT 0009. 2. NOx tons after should be 1305.14 due to the .64 tons addition from the fire pump engine EST 0009.	1. The facility-wide total SO_2 emissions are 28.16 per year as reported on the Emission Inventory Questionnaire (EIQ) sheets and verified by LDEQ. 2. The change has been made.
PSD (III. Project Description)	**III. Project Description (Estimated Emissions)** 1. SO2 tons before was 28.10. The tons after should be 28.18 due to the .08 tons addition from EQT 0009. 2. NOx tons after should be 1305.14 due to the .64 tons addition from the fire pump engine EST 0009.	1. The facility-wide total SO_2 emissions are 28.16 per year as reported on the Emission Inventory Questionnaire (EIQ) sheets and verified by LDEQ. 2. The change has been made.
PSD (IV. Source Impact Analysis)	A. **BACT (2nd paragraph)** 1. Periods of start-up and shutdown (defined as less than 70% combustion turbine load) 2. BACT for VOC needs to show 3 ppmv instead of 3 ppmy.	1. The permit has been updated according to the most recent BACT analysis submitted by CLECO. 2. The change has been made.
PSD (Specific Conditions)	**Maximum Allowable Emissions Rates** 1. Change the PSD-LA-635 (M-1) to PSD-LA-635 (M-2). 2. CO needs to be changed from 70.10 TPY to 446.80 TPY for EQT 02, 03 & 04. 3. Change the Operating Capacity for EQT 06 & 07 from 300 to 166. 4. Change the Operating Capacity for EQT 08 from 166 to 300.	The changes have been made.