Entergy Corporate Greenhouse Gas Inventory for Calendar Year 2012

Verification Report

March 8, 2013

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Statement of Verification

March 8th, 2013

Entergy Corporation
Environmental Strategy & Policy Group
Entergy Services, Inc.
639 Loyola Ave (L-ENT-13D)
New Orleans, LA 70113

Scope

Entergy Corporation ("Responsible Party") engaged ICF International in cooperation with Cventure LLC ("ICF") to review Entergy Corporation's *2012 Corporate Greenhouse Gas (GHG) Inventory*, and supporting evidence including Entergy's Inventory Management Planning and Reporting Document (IMPRD), detailing the GHG emissions and associated source documents over the period January 1, 2012 to December 31, 2012. These components are collectively referred to as the "GHG Assertion" for the purposes of this report.

The Responsible Party is responsible for the preparation and presentation of the information within the GHG Assertion. Our responsibility is to express a conclusion as to whether anything has come to our attention to suggest that the GHG Assertion is not presented fairly in accordance with generally accepted greenhouse gas (GHG) accounting standards, in particular *ISO 14064 Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (ISO, 2006).*

Methodology

We completed our review in accordance with the ISO 14064 Part 3: *Greenhouse Gases: Specification with guidance for the validation and verification of greenhouse gas assertions* (ISO, 2006). As such, we planned and performed our work in order to provide limited, rather than absolute, assurance with respect to the GHG Assertion. Our review criteria were based on this guidance. We reviewed the GHG Assertion and associated documentation. We believe our work provides a reasonable basis for our conclusion.

Conclusion

Based on our review, nothing has come to our attention which causes us to believe that the GHG Assertion is not presented fairly in accordance with the relevant criteria. The emission estimates were calculated in a consistent and transparent manner and were found to be a fair and accurate representation of Entergy Corporation's actual emissions and were free from material misstatement. ICF identified several minor, immaterial discrepancies in Entergy's greenhouse gas inventory which were corrected by Entergy during the course of the verification. ICF has verified a total of 49,438,750 metric tons of CO_2 equivalent (CO_2e) emissions for calendar year 2012.

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1 Verification Summary

Verifiers:	Craig Ebert, Khalid Husain (ICF International); Kevin Johnson (Cventure)
Internal Peer Reviewer:	Aaron Schroeder, P.Eng.
Verification Timeframe:	December 2012 to March 2013
Objective of the verification:	Limited level of assurance on Entergy's Corporate 2012 GHG Inventory
Assurance being provided to:	Entergy Corporation
Verification standard:	ISO 14064-3:2006 (ISO, 2006)
Verification criteria employed:	Inventory prepared according to the World Resources Institute and World Business Council for Sustainable Development GHG Protocol Corporate Standard.
Verification scope – Gases:	Carbon Dioxide, Methane, Nitrous Oxide, Sulfur Hexafluoride, Hydrofluorocarbons
Organization:	Entergy Corporation
Location:	U.S.A.
Temporal period:	January 1, 2012 – December 31, 2012
Main Contact	Craig Ebert Senior Vice President 601 W. 5th St., Suite 900 Los Angeles, CA 90071, USA Email: craig.ebert@icfi.com Tel. (213) 312-1792
Main Contact	Rick N. Johnson Manager, Corporate Environmental Operations Environmental Strategy & Policy Group Entergy Services, Inc. 639 Loyola Ave (L-ENT-13D) New Orleans, LA 70113 rjohn15@entergy.com (504) 576-5246 (office)

2 Introduction

Entergy has engaged ICF International to provide a third party verification of its corporate-wide GHG emissions for calendar year 2012 for voluntary organization-wide GHG reporting purposes. Cventure LLC serves as a partner to ICF International in the verification exercise.

Entergy's GHG emissions inventory uses an equity share approach to establishing boundaries.

The 2012 GHG inventory includes the following emissions sources:

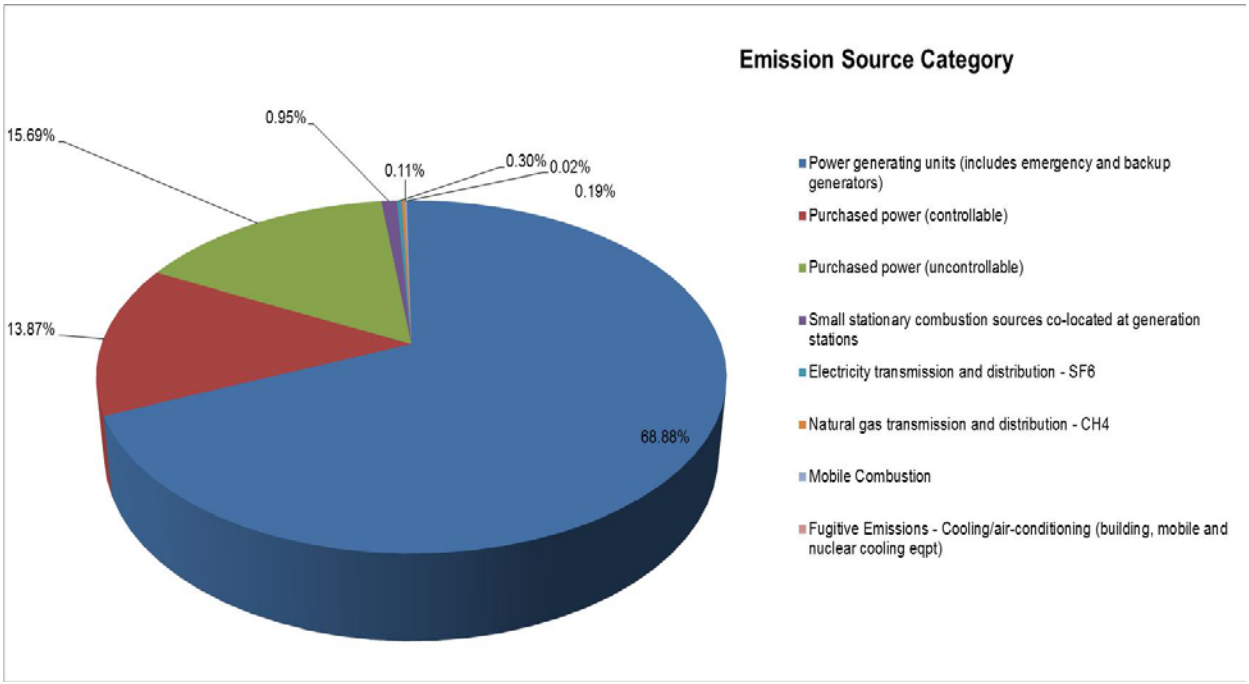
Scope 1**:** Stationary combustion in electric generating units and small sources at company facilities; mobile combustion in company fleet vehicles; fugitive methane from natural gas transmission systems; fugitive sulfur hexafluoride (SF_6) from electric power transmission and distribution systems; and fugitive hydrofluorocarbons (HFCs) from building HVAC systems, district cooling operations, and vehicle air conditioning systems.

Scope 2: Indirect emissions associated with both contract and spot market purchased electricity.

Scope 3: Purchased electricity for resale to end-users.

GHG emissions associated with electricity used in Entergy facilities are accounted for within stationary combustion emissions. Emissions associated with line losses in electric power transmission and distribution systems are included within the stationary combustion and purchased electricity emissions.

All electricity consumed in the operation of generating plants and consumed in Entergy's various administrative and commercial buildings and operations are accounted for in Entergy's direct emissions from stationary combustion. The GHG emissions resulting from the full life cycle of the various fuel sources are not included in the inventory.



3 Verification Execution

The scope of the verification was defined during the verification planning stage and is detailed in the Verification Plan, which is appended to this document. The Verification Plan also describes ICF's verification process that was executed through the course of the verification. The specific verification procedures that were planned and executed are described in the appended Sampling Plan.

This is an ISO 14064-3 -based verification exercise, having been conducted to achieve a limited level of assurance. Given the status of Entergy Corporation's GHG emissions inventory and management system, and that this was only the second verification activity under the ISO 14064 guidelines and specifications, a limited level of assurance verification was appropriate for this project.

The 2012 GHG inventory verification focused primarily on direct emissions from fossil fuel usage at large electric generating facilities using Continuous Emission Monitoring System (CEMS) data; indirect emissions from purchased power facilities; and direct emissions from small stationary combustion sources at Entergy fossil and nuclear generating stations. Entergy's 2012 GHG Inventory includes small sources that are *de minimus* in nature (small stationary combustion; mobile combustion from company fleets; and fugitive emissions including CH_4 from natural gas transmission and distribution, SF_6 from electricity transmission and distribution, and air conditioning/cooling refrigerant HFC emissions). Entergy noted in its 2012 GHG Inventory Management Planning and Reporting Document (IMPRD) and also in its 2012 GHG Inventory that all of these small sources except HFC-related emissions were updated for the 2012 Inventory. As such, our verification efforts have included a review of these small sources except HFC emissions as this sector's emissions was a carry-forward from previous years, and they were already reviewed in prior year verifications.

3.1 Site Visit

A site visit was conducted during the period of January 21-23, 2013 in Arkansas. The site visit consisted of two types of meetings. One set of meetings was devoted to better understanding the operations, data gathering processes and links to other data systems, management controls, and overall information systems at the System Operations Control (SOC) center in Pine Bluff, Arkansas, as well as at the Arkansas-Transmission Operations Center (TOC) in Little Rock, Arkansas. The second set of meetings included visits to pre-selected plants (White Bluff Plant and Lake Catherine Plant, both in Arkansas), as part of our sampling exercise in an effort to obtain data from plants and to better understand GHG information and data management systems. This included a review of all greenhouse gas emission sources and sinks in the facility through a review of the process flow, metering and data flow diagrams. Subsequently, a review of metering and data management processes was discussed with control room operations staff, including a review of meter calibration/validation procedures.

The site visit was an important step in planning and executing the verification. During the course of the office and selected plant tours, ICF interviewed key site operations personnel regarding power and fossil fuel generation plants operations and environmental data management at Entergy.

Key Entergy staff interviewed at Pine Bluff SOC and Little Rock TOC included:

- Cameron Warren and Frank Bowers, Pine Bluff SOC
- James (Von) Puska, Little Rock TOC

Key Entergy staff interviewed in-person during the White Bluff Plant and Lake Catherine Plant included:

- Barry Snow, Senior Environmental Specialist (White Bluff Plant)
- Tommy Gunn, Chemistry/Environmental Specialist (Lake Catherine Plant)
- Tracy Johnson, Fossil Environmental Manager for Entergy Arkansas accompanied the verification team to both plants.
- Control Room Operators at both plants.

In addition to the site visit, ICF held conference calls with the following key personnel to gain a better understanding of Entergy's operations and data management procedures:

- Rick Johnson, Corporate Environmental Operations
- Charles John and Diane Mehra, Intra-System Billing (ISB)
- Scott Celino, Generation and Fuels Accounting
- Grady Kaough, Power Trading Operations
- Scott McMahan, Pine Bluff System Operations Center (SOC)
- Cameron Warren, Pine Bluff System Operations Center (SOC)
- Ryan Trushenski, Solid Fuel Supply – System Planning and Operations (SPO)
- Dave Sommers and Jeff Hogsett, Gas and Oil Supply
- Tad Chenet and Minh Nguyen, Fossil Environmental Services, Emissions Monitoring and Markets
- Juan Jones, Transmission Operations

3.2 Verification Approach

This ISO limited level of assurance verification effort involved the review of the logic and procedures used to compile the emission estimates, determine completeness and accuracy in calculations, and to assess the validity of the inventory design itself. It also focused on a review of the procedures in place and identified any missing or incorrectly calculated values. Emissions data were reviewed at a high level to detect internal inconsistencies, identify outliers and find potential errors in reporting, and included boundaries' completeness checks. Data in supporting spreadsheets and from corporate Entergy databases were also examined under this verification review.

A detailed technical review of the methodologies, approaches, and calculations used in Entergy Corporation's inventory estimates was conducted in this verification effort. This was combined with a sampling of data sources used during the compilation of the GHG emissions inventory by Entergy. Documentation was examined, including reviews of disaggregated data, and the audit trail followed below the business entity level to raw data sources for several Entergy power generation units and power purchase agreements. The section that follows outlines the approaches used to review the main sources of the 2012 GHG inventory.

Stationary Combustion: Fossil Fuel Usage at Generating Facilities

The entire inventory of Entergy fossil generation units was reviewed at a limited depth, and a significant sample of data from select units was reviewed in greater detail. Generation units were selected for detailed audit trail reviews based primarily on relative contribution to the 2012 corporate GHG emissions inventory, e.g., using the 1% *de minimus* accounting methodology/reporting threshold of Entergy's GHG inventory, as unit selection screening priority. Other considerations in selecting units for detailed review included large, "sister" units at the same selected facility, availability of facility fuel usage validation data (for gas-fired facilities), and also to account for some overlap with last year's samples (to test for any changes), as well as a selection of new samples.

The nineteen (19) generation units selected for this more detailed desktop review included the following six (6) coal and thirteen (13) gas units:

Coal

- Big Cajun 2 – 2B3
- Independence 1
- Independence 2

- RS Nelson 6
- White Bluff 1
- White Bluff 2

Gas

- Acadia CT4
- Baxter Wilson 1
- Baxter Wilson 2
- Gerald Andrus 1
- Lake Catherine 4
- Lewis Creek 1
- Lewis Creek 2
- Michoud 3
- Ninemile Point 4
- Ninemile Point 5
- Perryville Power Station 1-1
- Perryville Power Station 1-2
- RS Nelson 4

The following information was received from Entergy and reviewed in relation to the above samples:

- Annual CO_2 /flue gas flow monitors relative accuracy test audits (RATAs) for the six (6) selected coal units;
- Quarterly CO_2 CEM linearity checks for the six (6) selected coal units;
- Natural gas flow meter CEMS calibration/accuracy checks for all thirteen (13) gas units;
- EPA emissions collection and monitoring plan system (ECMPS) quarterly feedback reports for all nineteen (19) units;
- Annual data on CO_2 emissions, electricity generation (MWh), and heat input (total Btu) for all nineteen (19) units (from EPA Clean Air Markets database);
- Monthly data on electricity generation (MWh) and heat input (total Btu) for seventeen (17) of the Entergy-operated units (from Entergy's Performance Monitoring and Diagnostics [PM&D] data historian database; PM&D data are not available on the combustion turbines at Acadia, and Entergy does not operate Big Cajun 2);
- Monthly facility-level gas burn data for all natural gas-fired electric generation facilities (from Entergy's Gas Database, maintained by the natural gas purchasing and accounting department);
- Hourly CO_2 CEMS data for 2012 obtained directly from the plant's CEMS DAHS for the two units at the on-site survey visit coal-fired facility (White Bluff 1 and 2); and
- Multiple days of coal burn sampling data for one (1) coal-fired unit (RS Nelson 6), and two (2) coal-fired plants (Independence and White Bluff).

The nineteen (19) units above that were reviewed in greater detail represented approximately 73% of Entergy's total direct CO2 emissions from power generation units, and approximately 50% of Entergy's total corporate GHG emissions, in 2012.

Organizational boundaries were verified using information contained in Entergy's SEC 10-K report for 2012, Entergy's 2011 Statistical Report and Investor Guide, Entergy's 2011 Annual Report, and Entergy's inventory list of generation assets. As described in Entergy's GHG Inventory Management Planning and Reporting Document (IMPRD), Entergy GHG emissions inventory boundaries are determined on an equity share basis (i.e., the percent equity share of those facilities owned by Entergy which Entergy owns jointly with other companies) which was used to calculate the GHG emissions in the inventory database for this category. These equity share values in the GHG inventory were cross-checked against the data provided in the IMPRD, and Entergy's statistical and 10-K reports.

CEMS reports supplied by Entergy were checked against both the GHG emissions data in their GHG inventory spreadsheet database, and the EPA Clean Air Markets' air monitoring program data (AMPD) database, for the nineteen (19) above selected units. Monthly and annual CO_2 CEMS reports were generated by ICF from queries of the AMPD database, and were checked and confirmed against the data for those nineteen (19) sampled units as reported in Entergy's GHG emissions inventory spreadsheets. Annual AMPD database query report results for all Entergy fossil generation units were checked and confirmed against the Entergy GHG Inventory spreadsheets.

Associated CEM system and natural gas flow meter QA/QC supporting documentation (including relative accuracy test audits, linearity checks, and flow meter calibration tests) was reviewed for all nineteen (19) Entergy generating units sampled. These documentary evidence verification checks were performed and confirmed that the reported GHG emissions data, and CO_2 emissions/flue gas flow and natural gas flow monitoring measurements and monitoring calibrations, were accurate, and the associated measurements data were reliable and reported correctly in the Entergy GHG inventory.

For each of the units sampled, various error checking tests were performed on the Entergy GHG inventory spreadsheets, and the sampled data to assess the information collected, including some examples such as record counts, missing data, re-computation, and other cross-checks. For each of the selected units, some aggregation calculation checks, and source type and equity share checks, were made and compared against database outputs/reports and the Entergy GHG inventory spreadsheets. Also, for each fuel type among the selected generating units, a sampling of daily CO_2 emissions values were checked using an alternative quantification methodology, based on activity data (e.g., fuel heat input values) and emissions factors.

Through the course of the verification program, the data management systems and controls employed in the quantification of emissions were reviewed, as detailed in the Sampling Plan procedures. These systems were found to be effective in the calculation of the GHG Assertion.

Purchased Power

The key emissions factors, sources, and calculations that Entergy used for its Purchased Power (comprising Controllable Power Purchases and Non-Controllable Power Purchases) in the 2012 inventory database were checked. Together the data from these two sources correspond to approximately 30% of the total Entergy Corporate GHG emissions in 2012.

A monthly breakdown of total purchased power was obtained from Entergy's Generation and Fuels Accounting for review purposes and cross-checked against the GHG Assertion. In addition, raw data from the TRADES database containing controllable purchased power for 2012 was received from System Planning and Operations (SPO) and was cross-checked against the Entergy GHG inventory spreadsheets. These two processes were outlined in the IMPRD as being central to the determination of the purchased power-related emissions.

This year, an additional comparison was performed between the total purchased power amount from Entergy's Generation and Fuels Accounting and the total purchased power amount in the Intra-System Billing (ISB), as well as with data extracted from the Pine Bluff SOC. While these checks were not central to the GHG Assertion, they revealed useful information on various systems and their linkages, and served as an additional exploratory check.

Small Stationary Combustion Sources – Fossil Generating Plants

GHG emissions data for these sources (i.e., auxiliary boilers and other sources, considered 'smaller' than large fossil generating plants) were updated to reflect Entergy's CO_2e 2011 estimates submitted under the U.S. Environmental Protection Agency's (EPA) Mandatory Reporting Rule. ICF reviewed the 2011 data submitted by Entergy to the EPA GHG Reporting Program in relation to the GHG Assertion.

Other Sources

Entergy has a number of small sources that individually and collectively are *de minimus* in nature, as noted in the IMPRD. Nonetheless, Entergy did update all of those small sources' emissions for its 2012 GHG Inventory except air conditioning/cooling refrigerant emissions, which were a carryover from past years. Sources that were updated included small stationary fossil; mobile combustion from company fleets; CH_4 from natural gas transmission and distribution; and SF_6 from electricity transmission and distribution. Back-up data and explanations were provided for each of these sources and checked by ICF against the GHG assertion. Telephone calls were held with Entergy's Environmental Manager to discuss the methods used and data employed in the updates.

4 Data Management and Control System Review

A critical element of the verification process was for the Verification Team to gain a thorough understanding of the data management systems and controls employed by Entergy. This understanding necessitated a review of:

- The parties involved and their respective responsibilities;
- The facility data collection and automated data measurement and management systems;
- Software system configuration;
- Post-collection data manipulation;
- Quality assurance procedures employed to detect erroneous or missing data;
- Processes for updating historical data in the event that errors are detected;
- Document control and security systems, including access, and tracking of edits; and
- Changes to the data management system over time or opportunities for improvement.

Testing Internal Controls

The Verification Team developed a sufficient understanding of the GHG information system and internal controls to determine whether the overall data management system is sound, examining it for sources of potential errors, omissions, and misrepresentations. This assessment incorporated examining three aspects of the company's internal controls: (1) the control environment, (2) the data systems, and (3) the control and maintenance procedures. The testing procedures documented in the Sampling Plan included some procedures to test the effectiveness of the internal controls in place. The results of these tests influence the type and amount of activity data being sampled.

Conducting Substantive Testing

Substantive testing procedures were used to assess the reasonability and validity of the GHG Assertion where further testing was required to assess internal controls based on the observations and preliminary findings of the Verification Team. The specific procedures were summarized in the Sampling Plan as separate tables for each process or activity involved in the quantification and reporting of the GHG Assertion. Materiality was specified for each specific procedure and aggregate materiality was determined separately. The details of the testing of internal controls and substantive testing undertaken are described in detail in the final Sampling Plan.

The verification team developed a thorough knowledge of the data management and control systems utilized in the organization through the review of the Report (IMPRD), observations during the site visit, and interviews with key personnel. The following were the key data systems observed.

- TRADES – controllable power purchases tracking system: hourly purchase amounts from 1/1/2012 to 12/31/2012 inclusive were extracted and sent via Excel to ICF by Grady Kaough (via Rick Johnson).
- Generation Fuels and Accounting – Monthly purchased power totals for 2012 (12 months for 2012) in PDF form were sent to ICF by Scott Celino (via Rick Johnson)
- ISB (Intra-system billing) – Purchased power data was sent by Charles John.
- PM&D data – for large fossil generating stations
- CEMS data – for large fossil generating stations (as well as for small stationary sources that have CEMS)
- Gas purchases data – monthly for all gas-fired electric generating units – from Karen McIlvoy's group: purchase amounts inputed into ISB.
- Coal purchases data – from Ryan Trushenski (solid fuels): purchase amounts inputted into ISB.

The following non-critical data was requested and obtained for exploratory checks and knowledge enhancement for both GHG data comparison purposes as well as for information systems:

- TRADES – a subset of non-controllable power purchases data from 1/1/2012 to 12/31/2012 inclusive was extracted and sent via Excel to ICF by Grady Kaough (via Rick Johnson).
- SOC – a subset of power purchases data from 1/1/2012 to 12/31/2012 inclusive was extracted and sent via Excel to ICF by Cameron Warren (via Rick Johnson).

5 Verification Results

5.1 Discrepancies

The table below details discrepancies found during the verification process for each procedure, a discrepancy title (brief description) and final status. Further explanations of the discrepancies are shown below in the subsequent table.

Procedure	Discrepancy Title	Final Status
B1: Established Organizational Boundaries	None detected	
B2: Review of Operating Conditions	None detected	
C1: True-Up and Re-Performance Calculations	1. Minor discrepancy in CH_4 emissions factors for fugitive emissions from natural gas transmission and distribution in relation to published and latest sources	Immaterial discrepancy
C2: Minor/Negligible Emissions - Methodology and Documentation	None detected	
D1: Data Gathering and Quality Controls	None detected	
D2: Data Confirmation against External Sources	2. Minor discrepancy in cross-check between total purchased power numbers from two different sources (ISB and Generation Fuels and Accounting)	Immaterial discrepancy
D3: Data Migration into Inventory	None detected	
A1: Final Verification Assessment	None detected	

Discrepancy Title	Discrepancy Description
1. Minor discrepancy in CH4 emissions factors for fugitive emissions from natural gas transmission and distribution in relation to published and latest sources	The CH_4 emissions factors for fugitive emissions from natural gas transmission and distribution did not exactly match published factors from the *API Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and the Natural Gas Industry* (2009). The values employed in the GHG Assertion were indicated as being referenced from the Gas Research Institute (GRI) but a specific source was not given. The difference in emissions for this sector (based on what was employed and what could have been applied from API) was 0.24%, and 0.0005% of the total inventory. This is reasonable given that API factors have drawn from the experience of GRI work in this area.

Discrepancy Title	Discrepancy Description
2. Minor discrepancy in cross-check between total purchased power numbers from two different sources (ISB and Generation Fuels and Accounting)	As part of the cross-checking analysis of total purchased power, ICF reviewed annual purchased power data from Generation Fuels and Accounting and this year performed a new and additional check by comparing that annual number to total purchased power from ISB. The numbers were within 2% of each other. This is reasonable given that Generation Fuels and Accounting and ISB work together in accounting and billing functions for various items including purchased power. Entergy applied the higher number (from Generation Fuels and Accounting) and this thus represents a more conservative approach.

5.2 Aggregate Materiality

The sum of the immaterial discrepancies in the GHG Assertion does not result in a breach of materiality of discrepancies greater than 10% of the total GHG Assertion. This is in line with the uncertainty assessment of Entergy's inventory.

5.3 Other Findings

- For the nineteen (19) units identified as targets for more detailed audit sampling, air monitoring program data (AMPD) monthly/annual CO_2 CEMS data from US EPA's Clean Air Markets database system were reviewed. These results were verified against the direct emissions reported in Entergy's GHG emissions inventory spreadsheets. No material errors or omissions associated with Entergy's GHG emissions inventory accounting and reporting were identified, as part of this US EPA CO_2 emissions database and Entergy GHG emissions inventory spreadsheets/supporting documentation comparisons and data checks.

- Emission factors for CH_4 and N_2O emissions from each of the Entergy fossil generation units were also checked. A minor, immaterial discrepancy in the coal-fired CH_4 emission factor was identified in those checks, and was subsequently corrected by Entergy during the course of the verification program.

- Organizational and operational boundary verification checks revealed a significant, yet immaterial discrepancy in Entergy's equity share of the RS Nelson 6 unit's GHG emissions. This error was corrected by Entergy during the course of the 2012 GHG inventory verification program. Also, verification checks of the Entergy stationary combustion CEM spreadsheet identified the omission of two newly acquired facilities (Hines and Hot Spring, in December 2012), from the Entergy corporate entity-wide aggregation total GHG emissions. These immaterial omissions were corrected by Entergy during the course of the 2012 GHG inventory verification program.

- A re-calculation of CO_2 emissions was made for two (2) of the data-sampled generating units (RS Nelson 4 and 6), based on fuel heat input data, and CO_2 emissions factors. For the coal-fired unit (Unit 6), daily test burn measurements data (including coal feed rates and fuel composition analyses), provided an alternative, direct measurement of fuel heat input. The results of this alternative quantification methodology comparison showed all calculated daily total CO_2 output values being within +/- 2% of the reported value from the CEMS system for the natural gas-fired unit. Also, the alternative quantification methodology average daily CO_2 agreement was within +/- 2% of the CEMS values for the coal-fired unit. This degree of agreement between two alternative emissions quantification methodologies is deemed to represent an acceptable margin of error for an ISO 14064 limited level of assurance verification program. This is further corroborated considering that compliance-based CEMS measurements are generally significantly more accurate than most emission factor-based quantification approaches (especially compared to the use

of default emission factors, as opposed to site-specific factors). Therefore, the alternative quantification methodology comparison results provide additional verification confirmation of the CEM systems measurement approach and results.

- For the nine (9) natural gas-fired facilities with generation units audit-sampled under this verification program, monthly and annual gas fuel use/total heat input data from the Entergy Gas Database (which tracks gas utility purchases and pipeline deliveries to Entergy generating stations) were compared to the EPA AMPD database results. (Note: Total heat input comparisons for natural gas-fired generation units were deemed appropriate here as the CEMS emissions reported are based on natural gas fuel flow rate measurements.) The results of these cross-check comparisons showed the facility-wide deviations between the two datasets had an overall average of +0.2% difference for the nine (9) facilities, with only one (1) of those facilities exhibiting a deviation greater than +/- 5% (-6.1%). Given the distinct differences between the metering characteristics (e.g., Entergy's electric generation unit-specific natural gas fuel flow meters, and the respective natural gas pipeline company's utility gas sales meter), as well as the Entergy natural gas fuel flow meters' measurements aggregated across a total of 2-5 units (except for Gerald Andrus 1), this level of agreement provides an additional degree of confidence in the reliability of reported results for Entergy's gas-fired generation, and reduction in the associated residual risk of misstatement.

- For the five (5) Entergy-operated coal-fired units, and twelve (12) of the natural gas-fired units selected for audit data sampling, comparisons on unit-specific fuel heat input from the EPA AMPD database were made by cross-checking MMBtu values from Entergy's Plant Performance Monitoring & Diagnostics (PM&D) department. This Entergy database contains unit operational data recorded by each unit's Pi historian (i.e., the data monitoring component of Entergy's supervisory control and data acquisition [SCADA] system). Unit-specific data were supplied on a monthly basis, for fuel flow, heat input (MMBtu), and power generation (MW-hr), for seventeen (17) of the nineteen (19) audit-sampled units. The results of these cross-checking comparisons showed individual unit deviations between the two datasets having an average deviation of -3.1% for the five (5) coal-fired units, with only two (2) coal units' deviations being greater than +/-5% (e.g., -6.7% and -7.5%, respectively). For the twelve (12) gas units with PM&D data, the individual unit deviations between the two data sets showed an average deviation of +0.1%, with only two (2) units having deviations greater than +/-5% (+8.5% and -11.9%, respectively). As in the case of the Gas Database comparison above, the results of this cross-check add further credibility to Entergy's coal- and gas-fired generation GHG emissions inventory reporting.

- ICF's review of controllable purchased power emissions led to identification of incorrect emissions factors in a few cases as well as two omitted and one mismatched amounts of power from controllable sources. These were subsequently corrected by Entergy during the course of the verification.

- ICF undertook a series of checks on non-controllable power purchases by requesting such data from ISB, TRADES and SOC. While our understanding of how such data can be extracted, the limitations in doing so, and the linkages between these systems increased, this effort underlined that further investigation (i.e., next year or thereafter) is warranted. In the meantime, the current method for obtaining non-controllable purchased data in view of limitations around the above data sets appears to be reasonable.

- Emissions factors for CH_4 and N_2O were initially inconsistent in some cases with latest published sources for mobile combustion. This was an immaterial finding but was corrected during the course of verification by Entergy.

- Total CO_2 emissions for small stationary combustion were initially slightly inconsistent in relation to 2011 GHG reports to EPA in a few cases. This was an immaterial finding but was corrected during the course of verification by Entergy.

- Through the course of the verification, the data management systems and controls employed in the quantification of emissions were reviewed, as detailed in the Sampling Plan procedures. These systems were found to be effective in the calculation of the GHG Assertion.

6 Verification Team

Since 1969, ICF International has been serving major corporations, all levels of government, and multilateral institutions. Globally, approximately 400 of our approximately 4,500 employees are dedicated climate change specialists, with experience advising public and private-sector clients. ICF International has earned an international reputation in the field of climate change consulting for its analytical rigor, in-depth expertise, and technical integrity through scores of GHG emissions-related assignments over the past two decades.

ICF International has carried out numerous facility-level GHG verifications and verifications of emission reduction projects. ICF has developed the necessary internal controls to ensure qualified and competent staffing uphold the principles of the relevant standard while quality control processes are utilized to assure data integrity is maintained and safeguarded. ICF's clients choose ICF for its strong brand, technical expertise, and rigorous methodological approach.

For this verification, ICF assembled a Verification Team consisting of experienced greenhouse gas verifiers and relevant technical experts.

Verifiers

Craig Ebert is a Managing Director in ICF's Los Angeles Office, and supports commercial and public clients internationally on strategic management of the risks and opportunities posed by climate change and attendant impacts on shareholder value. He has worked for a wide variety of public and private clients, including most recently Yahoo!, News Corporation, eBay, Time Warner, Exelon, Duke, Fidelity, TransCanada, El Paso, World Bank, Lafarge, Repsol, Aracruz, and Petrobras. He has directed ICF's support to the US EPA as its primary climate change contractor, including support to about 50 countries under the US Country Studies Program, compilation of the official US greenhouse gas inventory to meet international commitments under the United Nations Framework Convention on Climate Change, and analysis of the cost and availability of options to reduce US emissions in support of international climate negotiations. His support includes assessing the cost and availability of various offset classes for different public and private sector clients and helping clients unlock the financial value of potential emission reduction projects in both voluntary and compliance markets.

Khalid Husain is a Manager for climate change mitigation and sustainability issues in ICF's Environmental and Social Sustainability Division within ICF's Energy, Environment and Transportation (EET) Practice. A LEED-EB accredited professional, he has approximately 12 years of experience in climate change, energy and environmental issues in both public and private sector capacities. His current work involves a range of technical assistance on greenhouse gas management issues. Mr. Husain brings strong knowledge and experience in GHG inventory development and verification, as well as in corporate sustainability at large through work with diverse clients. He has carried out, or is in the process of conducting, verification of GHG inventories against the Alberta's Specified Gas Emitters Regulation, California Climate Change Registry (CCAR), EPA Climate Leaders Protocol and the Carbon Disclosure Project. He has also worked of EPA Task Orders and is knowledgeable of international GHG protocols for the EU ETS, CDM and JI. His experience also includes advisory and analytical services on carbon offsets, on both the buy and sell sides, for both voluntary and CDM projects. Services include undertaking feasibility studies, conducting risk assessments and due diligence, drafting and revising project design documents (PDDs), and reviewing methodologies for offsets. Mr. Husain holds a Masters degree in International Affairs, joint focus in Economic & Political Development & Environmental Studies from Columbia University and a B.Sc. (Honors) in Earth and Planetary Sciences from McGill University.

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Internal Peer Reviewer

Aaron Schroeder is a Professional Engineer in the Province of Alberta and holds a BSc. in Engineering from the University of Saskatchewan. He has completed supplementary training in ISO 14064 as well as Auditing and Assurance Engagements through the University of Toronto, School of Continuing Studies. Aaron has acted as lead verifier on third-party assurance assignments for multiple compliance periods under Alberta's Specified Gas Emitters Regulation. These projects included work at SAGD facilities in Alberta's oil sands, a complex sour gas processing facility, two of Alberta's largest natural gas pipelines and combined-cycle electric generating facilities. Additionally, Aaron has completed numerous verifications as lead verifier for emission reduction (offset) projects in agricultural tillage management, wind electricity generation, and acid gas injection projects.

Conflict of Interest

ICF has conducted a review of any real or perceived conflicts of interest resulting from advocacy, intimidation, self-review, self-interest or familiarity. No threats to independence, either real or perceived, have been identified.

Statement of Qualifications

The information contained within this document and this statement of qualifications is complete and correctly represents the qualifications of ICF and the members of the Verification Team described herein. Dated this eighth day of March, 2013.

Senior Vice President
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Los Angeles, CA 90071, USA
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Appendices

Verification Plan

Sampling Plan

Verification Plan

Entergy

1 Introduction

This document provides details on the verification scope and process that is planned to conduct a limited level verification of their assertion, namely the 2012 organization-wide GHG inventory, for Entergy Corporation ("Entergy"). The GHG Assertion made by Entergy requires the quantification of the emissions produced during, and related primarily to stationary combustion of fossil fuels and purchased power, as well as a number of minor sources. An overview of operations for the organization will be provided in the Verification Report.

A Verification Risk Assessment will be conducted during the verification planning stage. Additionally, the results of the Risk Assessment will inform the development of the Sampling Plan, which will be included in the Verification Report.

The Verification and Sampling Plans will be updated through the course of the verification as additional information becomes available.

The verification conclusion will be documented in the Verification Statement and the verification findings will be further described in the Verification Report. The Verification and Sampling Plans will be appended to the Verification Report to provide information related to the verification scope and process.

2 Verification Scope

2.1 Objective

The primary objective of this verification engagement is to provide assurance to Entergy that the GHG Assertion is reliable, and of sufficient quality for:

- Internal purposes, namely tracking towards internal reduction targets as well as annual reports, corporate social responsibility (CSR) reports, and other disclosures;
- External voluntary reporting, primarily to the American Carbon Registry (ACR), the Carbon Disclosure Project (CDP), and the Dow Jones Sustainability Index (DJSI).

2.2 Parties and Users

The person or persons responsible for the provision of the GHG Assertion and the supporting information, as defined in Section 2.23 of ISO 14064-1:2006, is the "Responsible Party". For this verification, Entergy is the Responsible Party.

ICF International has been engaged to provide a third-party verification of the GHG Assertion. Experts from ICF International as well as from CVenture compose the "Verification Team".

The "Intended User," is defined in Section 2.24 of ISO 14064-1:2006 as the individual or organization identified by those reporting GHG-related information that relies on that information to make decisions. Entergy (and the public at large) are the intended users of the information contained in this verification.

2.3 Scope

The verification will be conducted in accordance with *ISO 14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions.* The verification will be carried out at a *limited level of assurance.*

The following table defines the scope elements specified for the organization.

Scope Element	ISO 14064-3 Definition
Boundary	The Facility boundary, including legal, financial, operational and geographic boundaries
Infrastructure and Activities	The physical infrastructure, activities, technologies and processes of the organization
GHG Sources	GHG sources to be included
GHG Types	Types of GHGs to be included
Reporting Period	Time period to be covered

The manner in which each of the above scope elements apply to Entergy's GHG Assertion are described below.

Boundaries

During the initial verification planning, the organizational boundaries and the sources, sinks and reservoirs ("SSRs") which would be required to be included in the emissions inventory quantification will be explored. The procedures utilized to review the GHG Assertion were designed to support a *limited level* of assurance. These procedures systematically review:

- the emissions sources included in the quantification procedures;
- the methodology employed in the quantification procedures;
- data handling, information and management system and associated controls, and quality assurance / quality control activities;
- any changes in the quantification methodology, or to organizational boundaries due to acquisitions or divestitures, as compared to previous corporate GHG emissions reports;
- the GHG Assertion

Entergy has chosen to include all company owned assets and those under a capital lease consistent with 'equity share' reporting under EPA and WRI reporting protocols.

Infrastructure and Activities

According to Entergy's website[1], "Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than $11 billion and approximately 15,000 employees."

[1] Accessed on January 9, 2013 at http://www.entergy.com/about_entergy/

GHG Sources

The following key sources comprise the 2012 GHG inventory categorized by Entergy as follows:

Entergy Category	Emissions Source Category	Corporate Emissions Source	GHGs Included
Direct Emissions	Stationary Combustion	Power Generating Units	CO_2, CH_4, N_2O
		Small Stationary Combustion	CO_2, CH_4, N_2O
	Mobile Combustion	Corporate Fleet	CO_2, CH_4, N_2O
	Fugitive Emissions	Natural Gas Trans. & Dist.	CH_4
		Electricity Trans. & Dist.	SF_6
		Cooling/Air-Conditioning	HFCs
Indirect Emissions	Purchased Electricity		
	T&D Losses	Entergy Purchased Power Consumed on Entergy T&D Losses	CO_2, CH_4, N_2O
Optional Emissions Sources	Purchased Power (Controllable)	Controllable Purchased Power Sold to Customers	CO_2, CH_4, N_2O
	Purchased Power (Uncontrollable)	Uncontrollable Purchased Power Sold to Customers	CO_2, CH_4, N_2O

GHG Types

The emission portion of the assertion accounts for the following greenhouse gases:

- Carbon Dioxide (CO_2)
- Methane (CH_4)
- Nitrous Oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Sulphur Hexafluoride (SF_6)

Perfluorocarbons are not included in Entergy's inventory given the nature of its business and that this class of chemicals is not used in any of Entergy's operations in any sizeable amount.

Reporting Period

The GHG Assertion covers the 2012 calendar year, namely 1 January 2012 to 31 December 2012 inclusive.

2.4 Materiality

During the course of the verification, individual errors, omissions or misrepresentations (collectively referred to as discrepancies) or the aggregate of these discrepancies will be evaluated qualitatively and quantitatively.

Materiality defines the level at which discrepancies in the GHG Assertion or any underlying supporting information precludes the issuance of a limited level of assurance.

The verification team is responsible for applying professional judgment to determine if *qualitative* discrepancies could adversely affect the GHG Assertion and subsequently influence the decisions of the Intended User, in which case, the discrepancies are deemed to be material.

Quantitative discrepancies will be calculated individually to determine the impact of the discrepancy as a percentage of the GHG Assertion.

All discrepancies that are outstanding at the conclusion of the verification will be documented in the Verification Report and classified on an individual basis as either material or immaterial

Materiality Threshold

In the framework of a corporate entity-wide GHG inventory, the concept of materiality is defined in the context of the overall uncertainty in the reported data. A quantity, in this case errors and/or uncertainties associated with reported results, is typically considered to be "material" if it would influence any decision or action taken by users of the information. This definition of materiality is consistent with verification guidelines and goals for the reliability of reported data.

Materiality is not the same as a *de minimus* emissions threshold for either the exclusion of specific sources from the inventory, or the use of estimated values without ongoing, annual collection of associated activity data. While a *de minimus* exclusion from the inventory would contribute to overall uncertainty, completeness is only one component contributing to overall uncertainty.

Entergy's current GHG inventory management plan and reporting document (IMPRD) states that "..emissions estimated to be less than 1% of the total inventory are considered *de minimus* unless they are anticipated to change dramatically and grow above this threshold." Given the nature and relative magnitude of the various types of emissions sources in Entergy's GHG inventory, such a *de minimus* size threshold for Entergy's quantification methodology approach is reasonable. However, for its GHG inventory verification program, an appropriate materiality threshold needs to be devised in line with uncertainty and risk estimates. Based on those assessments, we suggest that such a materiality threshold for an ISO verification program, conducted to achieve a limited level of assurance, be established as 10%. Note that this materiality threshold may be breached by individual errors, or the sum of multiple errors detected in the various SSRs.

Individual discrepancies and the aggregate of individual discrepancies will be analyzed to determine if the materiality threshold has been breached.

2.5 Principles

ISO 14064-3:2006 defines six principles that should be upheld in the development of the GHG Assertion. These principles are intended to ensure a fair representation and a credible and balanced account of GHG emissions. The verification procedures developed and executed during the course of this verification will present evidence such that each of these principles is satisfied.

Relevance

Appropriate data sources are used to quantify, monitor, or estimate GHG sources. Appropriate minimum thresholds associated with emissions levels, i.e., from *de minimus* sources, are used to justify the exclusion or the aggregation of minor GHG sources or the number and/or frequency of data points monitored.

Completeness

All sources within Entergy's boundaries (as defined earlier) are included within an identified source category.

Consistency

Uniform calculations are employed between the base year and current accounting/reporting periods. Emission calculations for each source are calculated uniformly. If more accurate procedures and methodologies become available, documentation should be provided to justify the changes and show that all other principles are upheld.

Accuracy

Measurements and estimates are presented, without bias as far as is practical. Where sufficient accuracy is not possible or practical, measurements and estimates should be used while maintaining the principle of conservativeness.

Transparency

Information is presented in an open, clear, factual, neutral, and coherent matter that facilitates independent review. All assumptions are stated clearly and explicitly and all calculation methodologies and background material are clearly referenced.

Conservativeness

Appropriate parameters affecting the sources are utilized in the calculation of the GHG Assertion. When parameters or data sources are highly uncertain, the choice of a specific parameter, data source, or estimated or default value to be utilized, results in an overestimation of the GHG Assertion (i.e., total annual emissions would be overstated for the sake of conservativeness, and to avoid the risks associated with understating reported emissions).

2.6 Limitation of Liability

Due to the complex nature of the operations within the organization and the inherent limitations of the verification procedures employed, it is possible that fraud, error, or non-compliance with laws, regulations, and relevant criteria may occur and not be detected.

3 Verification Team

Since 1969, ICF International has been serving major corporations, all levels of government, and multilateral institutions. Globally, approximately 400 of our approximately 4,500 employees are dedicated climate change specialists, with experience advising public and private-sector clients. ICF International has earned an international reputation in the field of climate change consulting for its analytical rigor, in-depth expertise, and technical integrity through scores of GHG emissions-related assignments over the past two decades.

ICF International has carried out numerous facility-level GHG verifications and verifications of emission reduction projects. ICF has developed the necessary internal controls to ensure qualified and competent staffing uphold the principles of the relevant standard while quality control processes are utilized to assure data integrity is maintained and safeguarded. ICF's clients choose ICF for its strong brand, technical expertise, and rigorous methodological approach.

For this verification, ICF has assembled a Verification Team consisting of experienced greenhouse gas verifiers and relevant technical experts.

Verifiers

Khalid Husain is a Manager in the Climate Change Mitigation and Sustainability group of ICF's Energy, Environment and Transportation (EET) Practice. A LEED-EB accredited professional, he has approximately 12 years of experience in climate change, energy and environmental issues in both public and private sector capacities. His current work involves a range of technical assistance on greenhouse gas management issues. Mr. Husain brings strong knowledge and experience in GHG inventory development and verification, as well as in corporate sustainability at large through work with diverse clients. He has carried out, or is in the process of conducting, verification of GHG inventories under ISO 14064, Alberta's Specified Gas Emitters Regulation, California Climate Change Registry (CCAR), EPA Climate Leaders Protocol and the Carbon Disclosure Project. He has also worked on EPA's Task Order 70 and is knowledgeable of international GHG protocols for the EU ETS, CDM and JI. His experience also includes advisory and analytical services on carbon offsets, on both the buy and sell sides, for both voluntary and CDM projects. Services include undertaking feasibility studies, conducting risk assessments and due diligence, drafting and revising project design documents (PDDs), and reviewing methodologies for offsets. Mr. Husain holds a Masters degree in International Affairs, joint focus in Economic & Political Development & Environmental Studies from Columbia University and a B.Sc. (Honors) in Earth and Planetary Sciences from McGill University.

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4 Verification Process

The ICF approach for conducting verification of a GHG Assertion follows the tasks outlined in the following diagram. Although these tasks are generally completed sequentially, the order may be modified according to circumstances such as scheduling and data availability.

Pre-Engagement	Approach	Execution of Verification	Completion
1. Selection of Lead Verifier **2.** Initiate Conflict of Interest Procedure **3.** Pre-Engagement Planning and Proposal Development **4.** Contract Execution **5.** Assess GHG Program & Revise Procedures as Required **6.** Initiate Verification Tracking	**7.** Selection of Verification Team **8.** Communication with Client/Responsible Party **9.** Kick-off Meeting **10.** Verification Risk Assessment **11.** Draft Verification and Sampling Plan	**12.** Site Visit(s) **13.** Conduct Verification Procedures **14.** Issue Clarification & Data Request **15.** Revise & Finalize Verification and Sampling Plan **16.** Address and Evaluate Outstanding Issues	**17.** Evaluate Evidence **18.** Hold Verification Findings Meeting (if necessary) **19.** Draft Verification Report & Statement **20.** Internal Peer Review **21.** Independent Review of Impartiality **22.** Issue Verification Report & Statement **23.** Close Verification File **24.** Develop and Issue Management Memo(s)

4.1 Pre-Engagement

Prior to submitting a proposal to conduct this verification, the following pre-planning steps were taken:

- The results of any previous business engagements or verifications with the Responsible Party were reviewed to determine if any previous unresolved conflicts may preclude ICF from engaging in the verification;
- The client's motivation for completing the verification was established; and
- A Conflict of Interest procedure was initiated that documents whether any perceived or real conflicts were found when considering threats due to:
    - Advocacy
    - Financial Interest
    - Familiarity/Sympathy
    - Intimidation
    - Self-Review
    - Incentives

Following the acceptance of the proposal and signing of a contract for services, the Verification Team was selected. The Verification Team for this engagement is comprised of the individuals identified in Section 3.

4.2 Approach

An extensive knowledge of the Responsible Party's business, the relevant industry, and the details of the Responsible Party itself are required to conduct a thorough verification that can lead to a conclusion. The initial information collected about the Responsible Party and the Facility formed the basis of the preliminary draft Verification Plan. The development of the final Verification Plan is an iterative process; that is, the process will be completed several times through the course of the verification and the resulting plan will be updated as new information became available.

There are three types of risk associated with the GHG Assertion defined in ISO 14064-3:

- Inherent Risk
- Control Risk
- Detection Risk

The process of designing the Verification Plan will involve the development of Verification Risk Assessment for the Responsible Party. The steps in this process include:

- Reviewing the GHG Assertion, and the methodologies employed by the Responsible Party;
- Assessing the likelihood that a material misstatement might exist in the GHG Assertion, if no controls were used to prevent misstatements in the GHG Assertion (i.e. inherent risk);
- Assessing the control environment and the corporate governance process (i.e. control risk); and
- Reviewing each emission source identified by the Responsible Party, and evaluating the contribution of each source to the GHG Assertion and the associated potential material discrepancy for each.

4.3 Execution of Verification

With draft Verification and Sampling Plans in place, the verification procedures will be executed. This process involves collecting evidence, testing internal controls, conducting substantive testing, and developing a review file. Over the course of the verification, the draft Verification and Sampling Plans may change; the final Verification and Sampling Plans provided in the Verification Report reflect the verification parameters and procedures that were actually executed.

Site Visit

The site visit will be conducted by Khalid Husain and Kevin Johnson from January 21-23 inclusive in Arkansas. During the course of the site tour, ICF will:

a) interview key site operations personnel regarding the operations and data management of a selected coal plant (White Bluff) and gas plant (Lake Catherine) to cross-check GHG data as well as gain a deeper understanding of GHG information systems and controls at a plant level.
b) undertake discussions with the Pine Bluff systems operation center (SOC) and Little Rock transmissions operations center (TOC) staff for these functions at Entergy; and
c) discuss in depth the verification approach, data review procedures and other aspects of the verification with the Entergy point of contact for the verification, Rick Johnson.

Key Entergy staff to be interviewed on-site include:

- Rick Johnson, Manager, Corporate Environmental Operations (based in New Orleans but accompanying the ICF team during this trip)
- Barry Snow, White Bluff Coal Plant
- Tommy Gunn, Lake Catherine Gas Plant
- Scott McMahan and Cameron Warren, Pine Bluff SOC
- James (Von) Puska, Little Rock TOC

During the site visit all GHG emission sources for the White Bluff and Lake Catherine facilities will be reviewed to ensure appropriate identification and categorization. A review of process flow and metering diagrams will be followed by physical observation of the facilities.

Collecting Evidence and Review of Documentation

Sufficiency and appropriateness are two interrelated concepts that are fundamental to the collection of verification evidence. The decision as to whether an adequate quantity (sufficiency) of evidence has been obtained is influenced by its quality (appropriateness).

Through the execution of the verification procedures described in the final Verification Plan, the Verification Team will review key forms of evidence including physical, documentary and testimonial.

- Management documentation: policies, programs, and procedures related to the collection, safeguarding, and management of the data supporting the GHG Assertion;
- Records: records comprise time-sensitive data, correspondence, and files.
- Interviews: the interviews will provide information regarding operations and data management and will provide evidence to support the sufficiency of data controls; and
- Computer systems: data systems used to capture and manage the GHG-related data and to calculate the GHG Assertion.

The following are the key data systems that will be reviewed:

- TRADES – controllable power purchases tracking system: hourly purchase amounts from 1/1/2012 to 12/31/2012 inclusive.
- Generation Fuels and Accounting – Monthly purchased power totals for 2012 (12 months for 2012) in PDF form by Scott Celino.
- ISB (Intra-system billing) – Total purchased power data by Charles John.
- PM&D data – for large fossil generating stations
- CEMS data – for large fossil generating stations (as well as for small stationary sources that have CEMS)
- Gas purchases data – monthly for all gas-fired electric generating units – from Karen McIlvoy: purchase amounts inputed into ISB.
- Coal purchases data – from Ryan Trushenski (solid fuels): purchase amounts inputted into ISB.

The following non-critical data will be requested and obtained for exploratory checks and knowledge enhancement for both GHG data comparison purposes as well as for information systems:

- TRADES – a subset of non-controllable power purchases data from 1/1/2012 to 12/31/2012 to be sent via Excel to ICF by Grady Kaough (via Rick Johnson).
- SOC – a subset of power purchases data from 1/1/2012 to 12/31/2012 inclusive to be sent via Excel to ICF by Cameron Warren (via Rick Johnson).

Telephone and videoconference interviews will be held with staff involved in the above systems in order to review procedures and obtain relevant data.

Testing and Assessment of Internal Controls

The Verification Team will develop a sufficient understanding of the GHG information system and internal controls to determine whether the overall data management system is sound and if it supports the GHG Assertion. This assessment will seek to identify any weakness or gaps in the controls that pose a significant risk of not preventing or correcting problems with the quality of the data and examining it for sources of potential errors, omissions, and

misrepresentations. It will incorporate an examination of three aspects of the Responsible Party's internal controls: (1) the control environment, (2) the data systems, and (3) the control and maintenance procedures.

Assessment of Data

Substantive testing procedures will be used to assess the reasonability and validity of the GHG Assertion. Both quantitative and qualitative analysis will be performed to achieve the desired level of assurance. The verification procedures are described in the final Verification Plan as separate tables for each process or activity involved in the quantification and reporting of the GHG Assertion. The verification procedures include verification activities designed to:

- Review the Responsible Party's boundary, including a review of the completeness of emission sources identified;
- Review the Responsible Party's data sources to ensure the GHG Assertion is calculated based on metered or estimated data;
- Re-calculate the GHG Assertion, which demonstrates transparency and accuracy; and
- Review the GHG Assertion to ensure the emissions calculated by the Responsible Party has been accurately reported.

Clarification and Data Request

To facilitate information flow between the Verification Team and the Responsible Party, a consolidated request for additional information will be developed through the course of the verification and issued to the Responsible Party. This "Clarification and Data Request" will be used to document information requests and summarize the responses. It will also be used to document the Verification Team's assessment of each response.

Developing a Review File

A review file (the "File") comprised of documents, records, working papers and other evidence collected and created during the course of the review that support the review conclusions will be developed for this verification. This evidence stored in hard copy and/or electronic format will serve to provide support for the verification conclusion, provide evidence that the verification was conducted in accordance with the criteria set forth in this document, and aid the Verifier in conducting current and future reviews.

The File will include:

- The GHG Assertion and supporting documentation, as submitted to Entergy;
- Decisions on the level of materiality and the results of the Verification Risk Assessment;
- Documentation on the Responsible Party's internal controls;
- Descriptions of the controls assessment work and results;
- Documentation of the substantive testing procedures that were carried out and the results;
- Copies of any correspondence with the Responsible Party or other parties relevant to the review;
- The Verification Team's working papers;
- The Clarification and Data Request with documented responses from the Responsible Party; and
- Client data (copies of relevant records, spreadsheets, and other data files).

4.4 Completion

This engagement will be formally closed after the verification has been executed and the Verification Report has been finalized.

Preparing the Verification Report

The purpose of the Verification Report is to document the verification findings. All discrepancies are described and compared to the materiality threshold individually and in aggregate. The Verification Statement, which presents ICF's verification conclusion, is included in the Verification Report.

Internal Peer Review Process

Prior to releasing the Verification Report and Verification Statement, an internal review process is conducted by the Internal Peer Reviewer. This process ensures that:

- All steps identified as being required to complete the verification were completed;
- Any identified material or immaterial discrepancies identified have been either:
  - corrected by the Responsible Party and reflected in the GHG Assertion; or
  - documented in the Verification Report, if discrepancies persist at the conclusion of the verification.
- All required documentation detailing the verification process has been prepared, delivered, and retained.

Closing the Engagement

The verification engagement will be closed out upon delivery of the final Verification Report.

5 Verification Schedule

The following schedule is planned for the verification (subject to change with agreement between the Verifier and the Responsible Party).

Description	Scheduled Date
Verification Kick-Off Meeting	December 19, 2012
Draft Verification Plan to Responsible Party	January 10, 2013
Site Visit	January 21-23, 2013
Preliminary Data Request	January 18, 2013
Final Clarification & Data Request	January 28, 2013
Clarifications on GHG Assertion	February 22, 2013
Draft Verification Statement and Report	March 6, 2013
Final Verification Statement and Report	March 8, 2013

6 Verification Risk Assessment

There are three types of risk associated with the GHG data management system and the GHG Assertion defined in ISO 14064-3:

- Inherent Risk
- Control Risk
- Detection Risk

The assessed level of risk for this verification dictates the degree of rigor planned for the verification procedures described in the accompanying Sampling Plan. Our established audit procedures and documentation systems ensure a thorough treatment of any risk identified, including determination of magnitude and sensitivity of that risk, during the assessment process. A qualitative risk assessment will be completed based on observations made by reviewing and assessing accompanying documentation, as well as assessing available information such as the GHG inventory file, interviewing key personnel, and reviewing supporting documents.

The *inherent* risk in Entergy's corporate-wide 2012 GHG Assertion will emanate from the large and complex nature of the company, the number of parties involved in managing their emissions inventory and developing their assertion, the number of emission sources, a large number of natural gas and coal plants used in the process, and a large number of power purchases occurring throughout the year. Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including more than 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators. Because of these reasons, in particular the sheer magnitude of Entergy's GHG footprint, the inherent risk is likely to be medium.

Control risk relates to the likelihood that a material misstatement in the 2012 GHG Assertion will not be prevented or detected by Entergy's internal control and data management systems. Control risks will be assessed primarily by reviewing data controls and management systems for large fossil generating units and purchased power, both comprising in aggregate nearly 99% of total company-wide emission as noted in the 2012 GHG Assertion. This percentage has remained largely the same over the last three years. The largest control risk in relation to the 2012 GHG assertion is likely to be the manual transcription method in which the inventory is prepared (i.e., emissions values are extracted from various sources and manually entered into an Excel spreadsheet). For purchased power, a number of data systems (such as TRADES and gas and coal purchases) feed into ISB (intra-system billing system). Both the individual data systems that comprise data input into ISB as well as ISB itself undergo QA/QC checks several times on an annualized basis. For all of the large, CEMS-equipped fossil fuel electric generation units, which contribute approximately 70% of Entergy's total GHG emissions inventory, there are very rigorous measurement, monitoring, and reporting (MMR) requirements established by the U.S. EPA. These CEMS MMR programs, and their robust associated QA/QC activities, serve as the basis for demonstrating regulatory compliance with various federal Clean Air Act and state air permit compliance requirements. Also, the equipment utilized in these CEM systems are well established technologies with demonstrated track records of accuracy, precision, and reliability. Because of all of these reasons, the control risk is likely to be low.

The *detection risk* is a measure of the risk that the verification evidence collected and reviewed will fail to detect material misstatements, should such misstatements exist. Unlike *inherent* and *control* risk, which are typically attributes of the facility types and technologies employed therein, *detection* risk is variable but can be maintained at a low level by designing an appropriate number of tests, and collecting an adequate sample size. ICF conducted a number of sampling tests, focused on large fossil electric generation units and purchased power facilities. These tests are outlined in the sampling plan. Our assessment is that detection risk is likely low, given the large number and appropriateness of the tests which have focused on the largest sector (by relative magnitude) of Entergy's 2012 GHG Assertion.

These tests have been designed and targeted at the greatest risk areas within Entergy's overall GHG inventory information management and data quality control system, namely the manual parts of the process. Also, for the large CEMS-equipped generation units, because there are so many of them in Entergy's system (~50), there would have to be multiple, long duration undetected control failures to create errors which would lead to material misstatement of Entergy's entity-wide inventory. (For example, in the 2010 case of two highly unusual CEM system failures, which went undetected for several months, while they affected GHG emissions of each unit by 5-10%, their collective impact on Entergy's overall corporate GHG inventory was less than 1%.)

Sampling Plan

Entergy's 2012 GHG Inventory Verification

Objective:

The Sampling Plan describes the procedures that will be conducted within the verification to review Entergy's 2012 GHG Inventory, specifically the GHG Assertion. These procedures have been developed in accordance with the verification principles described in the Verification Plan and customized for Entergy.

Testing Procedures:

The specific verification activities are summarized in separate tables for each procedure that has been designed to review the evidence supporting the GHG Assertion. As relevant, materiality is specified for each specific procedure. Aggregate materiality is determined separately.

Summary of Procedures:

Note that the following procedures are not necessarily performed in a sequential manner and may be dictated by the receipt of appropriate data sources. These procedures may also be conducted in an iterative manner as required. While it is appropriate to correct any errors or omissions as identified by the Verification Team, the Responsible Party must perform any required corrections to avoid the threat of self-review to the Verification Team.

Organizational Boundaries and Definition

B1: Established Organizational Boundaries

B2: Review of Operating Conditions

Calculation

C1: True-up and Re-Performance Calculations

C2: Minor / Negligible Emissions - Methodology and Documentation

Data Sources and Supporting Data

D1: Data Gathering and Quality Controls

D2: Data Confirmation against External Sources

D3: Data Migration into Inventory

Assertion

A1: Verification Assessment

Procedure Definition Table Explained

Z1 – Example Procedure Category – Example Procedure Title	
Introduction: This introduction serves to explain the reason the Verification Team is undertaking the procedures described below. For instance, the inclusion of all emission sources ensures that that quantification of the total emissions satisfies the principle of completeness.	
Type of Evidence	The *Type of Evidence* can usually be grouped as: Physical Examination, Confirmation, Documentation, Observation, Inquiries of the Client, Re-performance, or Analytical Procedures.
Data Sources	The *Data Sources* describes the form in which the evidence is presumed or is known to be available to the verification team. Specific Documents or Assigned Positions, for example.
Objective (specific principles)	The objective serves to focus the procedure as pursuant to one or more of the audit principles of: *Relevance, Completeness, Consistency, Accuracy, Transparency, or Conservativeness*.
Specific Activities	• In bullet form; • The *Specific Activities* are outlined here.
Error Conditions	• Again in bullet form; • The anticipated *Error Conditions* are listed here to aid the verification team; • As the Sampling Plan is a living document until the end of the verification process, additional error conditions may be identified during the execution of the procedures.

Organizational Boundaries and Definition

B1 – Established Organizational Boundaries	
Introduction: This procedure evaluates the boundaries defined by the Responsible Party against the GHG Assertion.	
Type of Evidence	Documentation, Observation, Inquiries of the Client, Physical Examination
Data Sources	Inventory Management Planning and Reporting Document (IMPRD), Process Flow Diagrams, GHG Assertion, Previous GHG Assertions, Facility Operations Personnel
Objective (specific principles)	*Completeness*, *Consistency*
Specific Activities	1. Compare the GHG emission sources listed for the organization in the GHG Assertion against GHG emission sources listed in previous GHG Assertions; 2. Compare the GHG emission sources listed for the organization in the GHG Assertion against the process flow diagrams for completeness; 3. Compare the GHG emission sources listed for the organization in the GHG Assertion against observations made during site tour for completeness; 4. Interview operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the current reporting period; 5. Interview operations personnel regarding completeness of equipment inventory described in the GHG Assertion; 6. Evaluate the appropriateness and quantification of any negligible emission sources.
Error Conditions	• Above *de minimus* threshold GHG emission sources, within the declared boundaries, which are not reported in the GHG Assertion.

B2 – Review of Operating Conditions	
Introduction: This procedure utilizes analytical procedures to identify changes in the scope of the GHG Assertion. This procedure was largely completed during the verification planning stage.	
Type of Evidence	Analytical Procedures, Inquiries of the Client, Documentation (e.g., IMPRD)
Data Sources	GHG Assertion, Operations Personnel
Objective (specific principles)	*Consistency*, *Completeness*
Specific Activities	1. Interview operations personnel regarding any operational issues that may have caused a significant change to the reported emissions (e.g., planned or unplanned shutdown, change in production, change in process); 2. Compare total emissions for each GHG emission source in the current period against prior periods;
Error Conditions	• Significant changes in emissions do not constitute an error condition, but do warrant further investigation.

Calculation

C1: True Up and Re-Performance Calculations	
Introduction: As part of verification procedures, ICF will check calculations for each emissions source, with an emphasis on purchased power, large stationary fossil plants (CEMS units), and small stationary units which together comprise over 99% of total corporate-wide GHG emissions for 2012. In order to ensure the accuracy of the GHG Assertion, the objective of this procedure is re-perform the calculations independent from the calculations performed by Entergy.	
Type of Evidence	Documentation, Re-performance
Data Sources	2012 GHG inventory and Report (IMPRD) In addition: 1. Purchased power: a. Controllable trades (on daily basis from 1/1/2012 to 12/31/2012 from Grady Kaough) from TRADES (Excel extracts), as well as sorted and purchased totals from Rick Johnson (also in Excel) as double-check. b. Total purchased power (monthly basis from January to December 2012) in the form of ISB extracts (12 PDFs) from Scott Celino c. ISB back-up transactions information and other relevant records from Charles Johns 2. Large stationary fossil plants: d. Selected CEMS reports, 19 in total, (from Tad Chenet/Minh Nguyen), sampling is at the smallest units corresponding to ~2% of total direct emissions (~1.5% of total ETR emissions), expected to represent approximately 73% of Entergy power generation direct emissions . These are: **Coal** • Big Cajun 2 – 2B3 • Independence 1 • Independence 2 • RS Nelson 6 • White Bluff 1 • White Bluff 2 **Gas** • Acadia CT4 • Baxter Wilson 1 • Baxter Wilson 2 • Gerald Andrus 1 • Lake Catherine 4 • Lewis Creek 1 • Lewis Creek 2 • Michoud 3 • Ninemile Point 4 • Ninemile Point 5

C1: True Up and Re-Performance Calculations	
	• Perryville Power Station 1-1 • Perryville Power Station 1-2 • RS Nelson 4 e. Inquiries about information regarding and data from the System Control and Data Acquisition (SCADA) database from System Operations; f. Coal purchasing (Ryan Trushenski) and two (2) short-term test burns data for one plant g. Gas purchasing (Karen McIlvoy) burns data – all plants – monthly basis. h. Plant performance monitoring and diagnostics (PM&D) data: monthly fuel use boiler heat input for most of the auditing sample selected units. i. CEMS supporting documentation and QA/QC back-up data for selected audit sample units 3. Small stationary combustion: 2011 data reported to EPA's GHG Reporting Program.

C1: True Up and Re-Performance Calculations	
Objective (specific principles)	*Accuracy, Transparency*
Specific Activities	General • Review documentation for completeness • Recalculate emissions numbers • Perform checks Emissions Factors • Calculate emissions from each emission source category from each Facility • Confirm and re-calculate (if applicable) emission factors against independent reference material
Potential Error Conditions	General • Disagreement between calculated and reported values; • Incorrect application of significant figures in calculation; • Disagreement between allocated values or inconsistent methodology. Emissions Factors • Incorrect or out of date emissions factors
Sample Unit	1. Purchased Power: a. All controllable trades (daily) extract in Excel b. Emissions totals for total purchased power on monthly basis 2. Large stationary fossil plants: a. 19 units selected for sampling in relation to PM&D data (request to be sent to Stanley Jaskot) and EPA CAM checks representing ~50% of total Entergy emissions, including: **Coal Units** • Big Cajun 2 – 2B3 • Independence 1 • Independence 2 • RS Nelson 6 • White Bluff 1 • White Bluff 2 **Gas Units** • Acadia CT 4 • Baxter Wilson 1 • Baxter Wilson 2 • Gerald Andrus 1 • Lake Catherine 4 • Lewis Creek 1 • Lewis Creek 2 • Michoud 3 • Ninemile Point 4 • Ninemile Point 5 • Perryville Power Station 1-1

C1: True Up and Re-Performance Calculations	
	• Perryville Power Station 1-2 • RS Nelson 4 For the selected units ICF would like to receive the following unit-specific, reported data from a query of the PM&D database of historical data, for calendar year 2012: • Fuel flow: MCF for gas or tons for coal • Heat input: MMbtu • Power generation: MW-hr • Average heat rate for aggregation period: Btu/kw-hr • Aggregation period for reporting totalized activity data on fuel flow, heat input, and power generation on a monthly basis. b. CEMS reports – for the following coal-fired and gas-fired units– request made to Tad Chenet/Minh Nguyen at Fossil Environmental: **Coal** • Big Cajun 2 – 2B3 • Independence 1 • Independence 2 • RS Nelson 6 • White Bluff 1 • White Bluff 2 **Gas** • Acadia CT4 • Baxter Wilson 1 • Baxter Wilson 2 • Gerald Andrus 1 • Lake Catherine 4 • Lewis Creek 1 • Lewis Creek 2 • Michoud 3 • Ninemile Point 4 • Ninemile Point 5 • Perryville Power Station 1-1 • Perryville Power Station 1-2 • RS Nelson 4 For each of the above CEMS-equipped gas or coal-fired units, ICF will request the following information for calendar year 2012: • Gas flow meter accuracy test/CEMS gas flow transmitter calibration analysis (gas-fired units) • CO_2 and stack gas flow meter CEMS relative accuracy test audit (RATA) annual test results (coal-fired units) • CO_2 CEMS quarterly linearity checks (coal-fired units)

C1: True Up and Re-Performance Calculations	
	• CO_2 quarterly electronic data report (EDRs) • ECPMS (emissions collection and monitoring plan system) feedback reports: Q1 – Q4 For the on-site sampled coal and gas units, respectively, at White Bluff and Lake Catherine, ICF will request similar information as above from the respective plant managers / environmental managers on site, including hourly CO_2 data for 2012 from the White Bluff on-site CEMS data acquisition and handling system (DAHS). 3. Small stationary plants – check "fossil fuel generating stations" emissions against EPA GHG Reporting Program data for 2011 . "Nuclear generating stations" and "other small plants" emissions are carryovers from 2005.
Sample Size	All emissions sources and values for: - Purchased power, broken out by controllable trades and total purchased power (to account for non-controllable trades). - Large stationary fossil plants. - Small stationary combustion (fossil generating plants only).
Materiality Threshold	10% of the GHG Assertion; qualitative errors will be reviewed on a case by case basis for materiality.

C2 – Minor/Negligible Emissions - Methodology and Documentation	
Introduction: In order to ensure that all relevant emission sources are included in the GHG Assertion, it is necessary to confirm that any negligible emission sources have been appropriately excluded.	
Type of Evidence	Documentation, Discussions with Entergy's Environmental Manager
Data Sources	2012 GHG Assertion, IMP
Objective (specific principles)	*Accuracy, Transparency*
Specific Activities	1. Review minor/negligible sources and discuss with Entergy environmental manager 2. Compare to earlier year inventories (2009, 2010 and 2011)
Potential Error Conditions	Material emission source(s) improperly excluded from GHG Assertion
Sample Unit	N/A
Sample Size	Minor/negligible emission categories and sources
Materiality Threshold	Qualitative and quantitative errors will be reviewed on a case by case basis for materiality

Data Sources and Supporting Data

D1 – Data Collection and Quality Controls	
Introduction: This procedure is intended to systematically review the Responsible Party's internal procedures and controls that are used to calculate the GHG Assertion.	
Type of Evidence	Documentation, Confirmation, Observation, Inquiries of the Client, Analytical Procedures
Data Sources	Data systems personnel, Operations personnel, Standard Operating Procedures and Manuals
Objective (specific principles)	*Completeness, Consistency, Accuracy, Transparency, Conservativeness*
Specific Activities	1. Observe or interview operations personnel regarding the operation of data transfer systems, including manual data entry procedures and associated controls; 2. Review or interview operations personnel regarding on-site sampling, laboratory and other analytical procedures; 3. Compare original data sources to data in calculation systems for consistency. 4. Assess the conformance of the GHG information systems and controls with the verification criteria.
Error Conditions	• Inconsistency between raw data and data supporting GHG Assertion

D2 – Data Confirmation against External Sources	
Introduction: Where possible, this verification procedure is used to provide further evidence to the data used to calculate emissions and production quantities reported.	
Type of Evidence	Confirmation, Analytical Procedures
Data Sources	Inventory Report and supporting external data/information: <u>1. Large fossil generating stations:</u> a. PM&D data – monthly (all 12 months for 2012) b. CEMS data – ECMPS reports (for 19 gas and coal-fired units (representing ~73% of Entergy power generation direct emissions, and ~50% of total Entergy emissions), and EPA CAM emissions database query reports c. Gas and coal burn data – monthly for all gas units (all 12 months for 2012); two sets of select daily burn data for White Bluff and Independence plants, and one set of daily burn data for RS Nelson 6. d. All CEMS-related QA/QC documentation for White Bluff and Lake Catherine units, and hourly CO_2 data for White Bluff units; <u>2. Small stationary combustion sources –</u> 2011 (or later) EPA GHG Reporting Program data submitted for all fossil generating stations – annual. <u>3. Purchased power:</u> In addition to expected data from TRADES (hourly controllable purchased power for all of 2012) and from Generation Fuels and Accounting (monthly purchased power totals), ICF will request the following as an external check: • ISB (Intra-system billing) – Purchased power data will be sent by Charles John. In addition, the following non-critical data will be requested and obtained for exploratory checks and knowledge enhancement for both GHG data comparison purposes as well as for information systems: • TRADES – a subset of non-controllables power purchases data from 1/1/2012 to 12/31/2012 inclusive via Excel to ICF by Grady Kaough (via Rick Johnson). • SOC – a subset of power purchases data from 1/1/2012 to 12/31/2012 inclusive via Excel to ICF by Cameron Warren (via Rick Johnson).
Objective (specific principles)	*Accuracy, Conservativeness*
Specific Activities	1. Review use of external data sources in GHG inventory for appropriateness; 2. Compare reported/metered values to those provided by secondary sources

D2 – Data Confirmation against External Sources	
Potential Error Conditions	• Unexplained, major discrepancy between metered/reported values and secondary source.
Sample Unit	Typically monthly or annual data primarily, with some cross-checks on daily data as relevant
Sample Size	1. Large fossil generating stations: a. PM&D data – for 17 units (representing ~47% of total Entergy emissions) b. CEMS data – ECMPS reports – for 19 gas and coal-fired units (representing ~73% of Entergy power generation direct emissions, and ~50% of total Entergy emissions) c. Gas and coal burn data – monthly (all 12 months for 2012) – for all gas units, and two sets of select daily data for White Bluff and Independence plants, and one set of select daily data for RS Nelson 6. d. All CEMS-related QA/QC documentation for White Bluff and Lake Catherine units, and hourly DAHS CO_2 emissions data for White Bluff. 2. Small stationary combustion sources – 2012 (or later) EPA GHG Reporting Program data submitted for all fossil generating stations - annual 3. Purchased power: In addition to data from TRADES (hourly controllable purchased power for all of 2012) and from Generation Fuels and Accounting (monthly purchased power totals), ICF will request the following as an external check: • ISB (Intra-system billing) – Purchased power data was sent by Charles John. In addition, the following non-critical data will request and obtain for exploratory checks and knowledge enhancement for both GHG data comparison purposes as well as for information systems: • TRADES – a subset of non-controllables power purchases data from 1/1/2012 to 12/31/2012 inclusive via Excel to ICF by Grady Kaough (via Rick Johnson). • SOC – a subset of power purchases data from 1/1/2012 to 12/31/2012 inclusive via Excel to ICF by Cameron Warren (via Rick Johnson).
Materiality Threshold	Quantitative errors will be reviewed on a case by case basis for materiality.

D3 – Data Migration into Inventory	
Introduction: This procedure is intended to review the transfer of data from calculations into the final GHG inventory ("GHG Assertion"), including any summary calculations that were required.	
Type of Evidence	Documentation, Re-Performance
Data Sources	Inventory Report/Spreadsheets, IMPRD, discussions with Entergy's Environmental Manager
Objective (specific principles)	*Accuracy*, *Transparency*
Specific Activities	1. Recalculate summary calculations performed by Entergy; 2. Compare calculated values to those in the GHG Assertion for transcription accuracy;
Potential Error Conditions	• Discrepancy between summary totals and individual sector values reported in GHG Assertion
Sample Unit	Data reported in the final GHG Assertion
Sample Size	All relevant information and emissions values
Materiality Threshold	Any discrepancies

Assertion

A1 – Final Verification Assessment	
Introduction: This procedure is intended as a final review of Entergy's 2012 GHG Assertion to ensure all required information is complete and all required documentation is attached.	
Type of Evidence	Documentation
Data Sources	GHG Assertion
Objective (specific principles)	*Completeness*
Specific Activities	1. Review each page of the GHG Assertion and IMPRD for completeness; 2. Provide Responsible Party with documentation, namely a verification statement and report, required for submission to voluntary reporting protocols
Potential Error Conditions	• Incomplete, inaccurate, or missing information in the GHG Assertion
Sample Unit	Data fields in the GHG Assertion
Sample Size	All fields in the GHG Assertion
Materiality Threshold	Any incomplete, inaccurate, or missing information