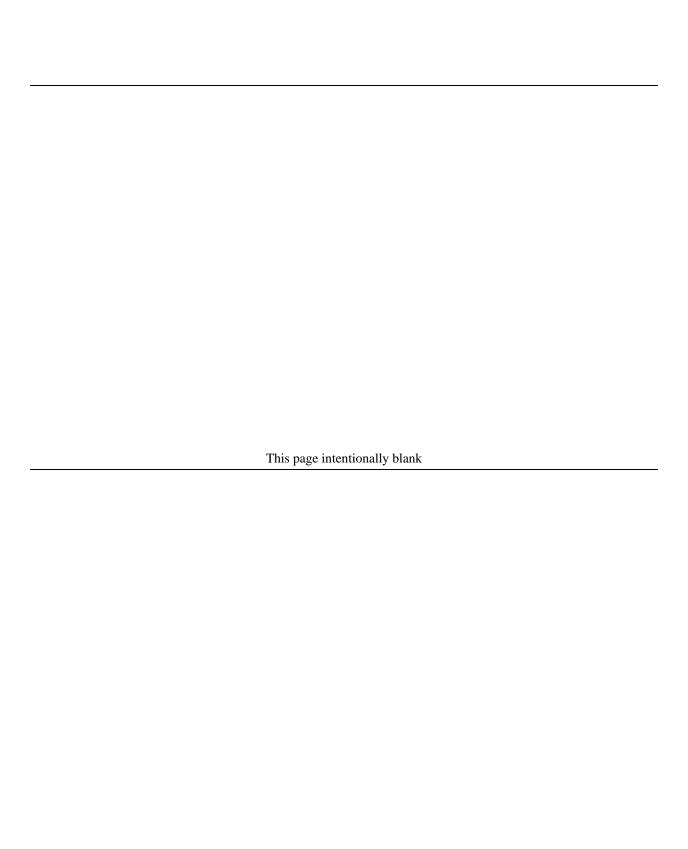


Entergy Corporation Greenhouse Gas Inventory for Calendar Year 2014

Verification Report

March 9, 2015

ICF International 9300 Lee Highway Fairfax, VA 22031



Statement of Verification

March 9, 2015

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 2014 Corporate Greenhouse Gas ("GHG") Inventory, and supporting evidence including Entergy's Inventory Management Plan and Reporting Document ("IMPRD"), detailing the GHG emissions and associated source documents over the period January 1, 2014 to December 31, 2014 inclusive. 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 GHG accounting standards, in particular, The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, Revised Edition, World Resources Institute and World Business Council for Sustainable Resource Development, March 2004.

Methodology

We completed our review in accordance with the ISO 14064 Part 3:2006 Greenhouse Gases: Specification with guidance for the validation and verification of greenhouse gas assertions. We planned and performed our work in order to provide a limited level of assurance with respect to the GHG Assertion. Our review criteria were based on The Greenhouse Gas Protocol and quantification methodologies referenced in Entergy's IMPRD. We reviewed the GHG Assertion and associated documentation and believe our work provides a reasonable basis for our conclusion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the GHG Assertion is materially misstated. 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 has verified a total of 40,195,784 metric tons of CO₂ equivalent (CO₂e) emissions for calendar year 2014.

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1 Verification Summary

Lead Verifier: Julie Tartt (ICF International)

Associate Verifiers: Kevin Johnson (Cventure), Mabel Fulford and Andrew Pettit (ICF International)

Technical Experts: Kevin Johnson (Cventure), Mollie Averyt (ICF International)

Internal Peer Reviewer: Aaron Schroeder, P.Eng. (ICF International)

Verification Timeframe: December 2014 to March 2015

Objective of the verification: Limited level of assurance on Entergy's Corporate 2014 GHG Inventory

Assurance being provided to: Entergy Corporation

Standard being verified to: ISO 14064-3:2006 Specification with guidance for the validation and

verification of greenhouse gas assertions

Verification criteria employed: The Greenhouse Gas Protocol, A Corporate Accounting and Reporting

Standard, Revised Edition, World Resources Institute and World Business

Council for Sustainable Resource Development, March 2004

Verification scope – Gases: Carbon Dioxide, Methane, Nitrous Oxide, Sulfur Hexafluoride,

Hydrofluorocarbons

Organization: Entergy Corporation

Inventory Boundary: Equity share of Entergy's corporate operations including electric power

production and retail distribution operations as well as its natural gas

distribution operations throughout the 2014 calendar year

Location: U.S.A.

Reporting Year: January 1, 2014 – December 31, 2014 (inclusive)

Verification Summary: No material misstatements were detected in the final GHG Assertion.

Limited level assurance verification statement issued.

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2 Introduction

Entergy Corporation ("Entergy") has prepared a voluntary greenhouse gas ("GHG") inventory for its corporate operations active through the 2014 calendar year. Entergy has engaged ICF International ("ICF") to provide a third-party verification of the GHG inventory, including Scope 1, Scope 2, and select Scope 3 emissions, ("GHG Assertion") for voluntary GHG reporting purposes for the 2014 calendar year. Cventure LLC serves as a partner to ICF International in the verification exercise.

The quantification of Entergy's corporate GHG emissions inventory is guided by the World Resources Institute and World Business Council for Sustainable Resource Development's *The Greenhouse Gas Protocol*, *A Corporate Accounting and Reporting Standard, Revised Edition, March 2004* ("the GHG Protocol"), using an equity share approach to establish the inventory boundary. The 2014 GHG inventory includes the following emissions sources (as depicted in the figure on the next page):

<u>Scope 1</u>: Stationary combustion in electric generating units and small sources at company facilities; mobile combustion in company fleet vehicles; fugitive methane from natural gas transmission and distribution ("T&D") systems; fugitive sulfur hexafluoride (SF₆) from electric power T&D systems; and fugitive hydrofluorocarbons (HFCs) from building HVAC systems and vehicle air conditioning systems.

<u>Scope 2:</u> Indirect emissions associated with grid purchased power for wholesale generation plants (outside of Entergy's regulated electricity transmission service territory).

<u>Scope 3:</u> Indirect emissions associated with controllable purchased power¹ for resale to end-users; customer consumption of distributed natural gas; and Entergy employee commuting.

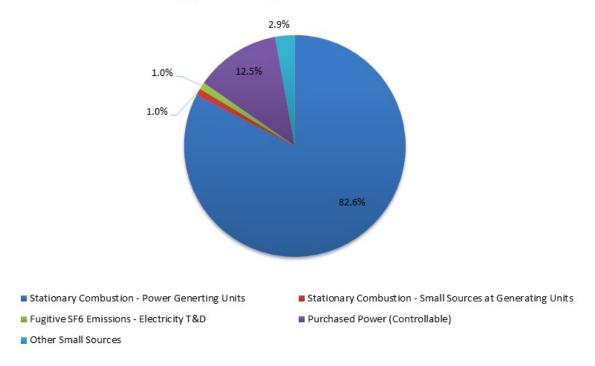
The GHG emissions associated with all electricity consumed in the operation of Entergy's generation facilities and in Entergy's various administrative and commercial buildings and operations, in the regulated service territory, are accounted for in the Scope 1 direct emissions from stationary combustion. In addition, emissions associated with line losses through electric power T&D systems are also captured in the Scope 1 emissions associated with stationary combustion. The GHG emissions associated with the full life cycle of the various fuel sources consumed through Entergy's business operations are not included in the inventory. In line with the 2013 inventory and Entergy's utility generation portfolio listed on the company's website², emissions associated with Louisiana Station Plant 1 are also not included in the 2014 inventory, as this plant generates electricity for the sole use of ExxonMobil under a long term lease agreement.

GHG emissions from stationary combustion and controllable purchased power in aggregate comprise approximately 95% of Entergy's total 2014 corporate GHG emissions.

¹ Controllable purchased power is defined as power for which the originating source (generating plant) is known and for which Entergy has made a direct buying decision.

 $^{^2\} http://entergy.com/content/operations_information/Utility_Fossil_and_Renewable_Portfolio.pdf$

Entergy 2014 Corporate GHG Emissions



Other Small Sources in the figure above, comprising approximately 2.9% of the inventory, include emissions associated with: mobile combustion, purchased electricity for business operations outside Entergy service territory, fugitive CH₄ (natural gas T&D), fugitive HFCs (HVAC systems and vehicles), consumer consumption of natural gas, and employee commuting.

This is the seventh year in which ICF has been engaged by Entergy for verification services pertaining to its annual corporate inventory.

This document describes the terms and scope of this verification. It serves to communicate the findings of the verification.

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 through the verification process are described in the appended Plan. The Verification Plan has evolved during the course of the verification exercise; the final version of the Plan is in the Appendix.

The 2014 GHG inventory verification focused primarily on direct emissions associated with fossil fuel consumption at large electric generating facilities using Continuous Emission Monitoring System ("CEMS") data, and indirect emissions associated with purchased power. Entergy's 2014 GHG Inventory includes several small emissions sources (small stationary combustion; fugitive emissions of SF₆ associated with electricity T&D; and customer consumption of distributed natural gas), some of which are *de minimus*³ in nature (mobile combustion in company fleet vehicles; employee commuting; and fugitive CH₄ associated with natural gas T&D; and HFCs from air conditioning/cooling refrigerant systems). All emissions sources in Entergy's corporate 2014 GHG inventory have

³ Entergy describes emissions sources that have been estimated to be less than 1% of the total inventory as de minimus in its IMPRD

been reviewed with a focus on stationary combustion from electric generating units and purchased power, given the risk-based approach used in this verification.

3.1 Site Visit

A site visit was conducted during the period of January 12-15, 2015 in Texas and Louisiana. 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 data systems, management controls, and overall information systems in Entergy offices in The Woodlands, Texas and New Orleans, Louisiana. The second included a visit to the Sabine Gas Plant (Units 1-5) in Texas, 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 GHG emissions 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 Sabine plant tour, 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 The Woodlands (System Planning and Operations ("SPO") division) and New Orleans offices included:

- Charles John, Intra-System Billing ("ISB")
- Ryan Trushenski, MISO data download and reconciliation
- Grady Kaough, Power Trading Operations
- Tad Chenet and Minh Nguyen, CEMS Information
- David Sommers, Gas Supply
- David Bruess, Chris Stokley, Al Rolston, and Scott Marino, Fuel Data Management
- Karen Radosivich, Ryan Plaisance, and Victoria Langley, Meter Data Management/Operations IT/PCI System
- Stanley Jaskot and KT Huang, Performance Monitoring and Diagnostics ("PM&D")
- Melissa Lejeune, Shannon Breaux and Jessica Landry, Generation and Fuel Accounting
- Toby Chu, T&D Environmental Management

Key Entergy staff interviewed in-person during the Sabine Plant (Units 1-5) included:

• Don Lierman, Environmental Analyst III, Sabine Gas Plant

3.2 Verification Approach

This section that follows outlines the approaches used to review the main emissions sources in the 2014 GHG inventory.

Stationary Combustion 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 2014 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

generation plant, availability of facility fuel usage validation data (for gas-fired facilities), and to account for some overlap with last year's samples (to test for any changes).

The nineteen (19) generation units selected for this more detailed desktop review included the following 5 coal and 14 natural gas units:

Coal

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

<u>Gas</u>

- Little Gypsy 1
- Little Gypsy 2
- Little Gypsy 3
- Michoud 2
- Michoud 3
- Ninemile Point 3
- Ninemile Point 4
- Ninemile Point 5
- RS Nelson 4
- Sabine 1
- Sabine 2
- Sabine 3
- Sabine 4
- Sabine 5

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

- Annual CO₂ /flue gas flow monitors relative accuracy test audits ("RATAs") for the five (5) selected coal units;
- Quarterly CO₂ CEM linearity checks for the five (5) selected coal units;
- Natural gas fuel flow meter CEMS calibration/accuracy checks for the fourteen (14) natural gas units audited in detail, and an additional thirteen (13) natural gas units to further extend our assessment of gas-fired units' measurement accuracy/uncertainty;
- EPA emissions collection and monitoring plan system (ECMPS) quarterly feedback reports for nineteen (19) units;

- Annual data on CO₂ emissions, electricity generation (MWh), heat input (total Btu), and operating time for all fifty-eight (58) Entergy units which operated in 2014, from the EPA Clean Air Markets Air Monitoring Program Data ("AMPD") database;
- Monthly data on electricity generation (MWh) and heat input (total Btu) for eighteen (18) of the Entergy-operated sampled units, from Entergy's PM&D data historian database. PM&D data are not available on the recently started commercial operations units at Ninemile Point (6A and 6B), and older units which do not have a Pi historian/distributed control system, which archives boiler operational process data (Ninemile Point 3).
- 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 CO₂ CEMS data for 2014 obtained directly from the plant's CEMS Data Acquisition and Handling System (DAHS) for the units at the on-site survey visit facility (Sabine Units 3-5); and
- Multiple days of coal burn sampling data for one (1) coal-fired plant (White Bluff).

The nineteen (19) units above that were reviewed in greater detail represented approximately 64% of Entergy's total direct CO₂e emissions from power generation units; and approximately 53% of Entergy's total corporate GHG emissions in 2014.

Organizational boundaries were verified using information contained in Entergy's SEC 10-K report for 2013, Entergy's 2013 Statistical Report and Investor Guide, and Entergy's inventory list of generation assets. As described in Entergy's GHG Inventory Management Plan 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 SEC reports.

CEMS reports supplied by Entergy were checked against both the GHG emissions data in their GHG inventory spreadsheets, and the EPA Clean Air Markets' AMPD database, for the nineteen (19) above selected units. Monthly and annual CO₂ 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.

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 thirty-two (32) Entergy generating units. These documentary evidence verification checks were performed and confirmed that the reported GHG emissions data, and CO₂ emissions/flue gas flow and natural gas flow monitoring measurements and monitoring calibrations, were accurate, and the associated measurements data were reliable, as reported 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 CO₂ 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 (Controllable)

The key emissions factors, sources, and calculations that Entergy used to quantify the emissions associated with its controllable power purchases in the 2014 GHG inventory were checked. This source comprised approximately 12.5% of the total Entergy 2014 GHG Assertion.

Raw data outlining daily (and monthly) purchased power by Entergy operating company and counterparty/long-term contract for 2014 was provided by the ISB group and cross-checked against the TRADES database containing controllable purchased power for 2014, as well as the Entergy GHG inventory spreadsheets.

All controllable power purchases were checked against SPO's raw data for correct MWh amounts. They were also checked for correct application of plant-specific emissions factors from EPA's eGRID database (2014 release for year 2010 data).

Other Emissions Sources

Entergy has a number of small sources that collectively comprise approximately 5% of the total GHG Assertion. These sources include emissions associated with small stationary combustion sources; mobile combustion (corporate fleet); fugitive CH_4 (natural gas T&D); fugitive SF_6 (electricity T&D); fugitive HFCs (HVAC and vehicle); purchased electricity for business operations outside Entergy service territory; customer consumption of distributed natural gas; and employee commuting. Many of those emissions sources are categorized in the *de minimus*, category as defined in the IMPRD (sources representing <1% of the total GHG Assertion). Each of these emissions sources, with size relative to total GHG Assertion, was reviewed through this verification as indicated below.

Scope 1 Emissions Sources:

- ➤ small stationary combustion sources 2013 Subpart C submissions reviewed, fuel volumes could not be confirmed in all cases (1% of GHG Assertion, close to *de minimus*)
- ➤ mobile combustion, corporate fleet 2014 fuel consumption data was used to quantify the emissions (0.1% of GHG Assertion, *de minimus*)
- ➤ fugitive CH₄, natural gas T&D estimates quantified for previous years reviewed, source of emissions factors used could not be confirmed (0.2% of GHG Assertion, *de minimus*)
- ➤ fugitive SF₆, electricity T&D estimate based on 2013 Subpart DD submission (1% of GHG Assertion, close to *de minimus*)
- ➤ fugitive HFCs, HVAC and vehicle estimates quantified for previous years reviewed (0.01% of GHG Assertion, *de minimus*)

Scope 2 Emissions Source:

▶ purchased electricity for business operations outside Entergy service territory – 2013 electricity consumption was used to quantify emissions (0.1% of GHG Assertion, *de minimus*)

Scope 3 Emissions Sources:

- ➤ customer consumption of distributed natural gas 2013 Subpart NN submissions reviewed (2.3% of GHG Assertion)
- ➤ employee commuting 2014 employee commuting survey data was used to quantify the emissions (0.1% of GHG Assertion, *de minimus*)

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 Verification 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. Sampling procedures are included in Section 7 of the Verification Plan.

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 are summarized in Section 7 of the Verification 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 Verification Plan.

The verification team developed a thorough knowledge of the data management and control systems utilized in the organization through the review of the 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 1/1/2014 to 12/31/2014 inclusive were extracted and sent via Excel to ICF by Grady Kaough (via Rick Johnson).
- Generation Fuels and Accounting Monthly purchased power totals for 2014 were sent to ICF by Shannon Breaux.
- 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 David Sommers: purchase amounts inputted into ISB.
- Coal purchases data from Scott Marino (solid fuels): purchase amounts inputted into ISB.
- ISB Purchased power data was sent by Sarah Maxwell and Charles John.

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: Organization Boundaries, Infrastructure and Activities	N/A	No discrepancies detected
C1: True-Up and Re-Performance Calculations	N/A	No discrepancies detected
C2: Minor/ <i>De Minimus</i> Emissions - Methodology and Documentation	Lack of transparency in some supporting data and methodologies applied	Immaterial qualitative discrepancy in Final GHG Assertion
D1: Data Collection and Quality Controls	N/A	No discrepancies detected
D2: Data Confirmation against External Sources	N/A	No discrepancies detected
D3: Data Migration into Inventory	N/A	No discrepancies detected
A1: Final Verification Assessment	N/A	No discrepancies detected

Discrepancy Title	Discrepancy Description
Lack of transparency in some supporting data and methodologies applied	The Responsible Party did not provide sufficient supporting data and methodological references for three emissions sources. In total these three emissions sources comprise approximately 2.3% of the total GHG Assertion. This lack of transparency affected small stationary combustion sources (insufficient fuel consumption evidence), fugitive emissions of SF ₆ (missing data in Subpart DD reporting), and fugitive emissions of CH ₄ associated with natural gas distribution (no source available for referenced emissions factors). The immaterial qualitative discrepancies may result in an understatement of the total asserted value.

5.2 Aggregate Materiality

The sum of the immaterial discrepancies in the GHG Assertion does not result in a breach of materiality (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 CO₂ 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 CO₂ emissions database and Entergy GHG emissions inventory spreadsheets/supporting documentation comparisons and data checks.

- Emissions factors for CH₄ and N₂O emissions from each of the Entergy fossil generation units were also checked, revealing no discrepancies or omissions.
- Organizational and operational boundary verification checks revealed no discrepancies or omissions.
- A re-calculation of CO₂ emissions was made for several of the data-sampled generating units (White Bluff 2 and Sabine 1-5), based on fuel heat input data, and CO₂ emissions factors. For the coal-fired unit (White Bluff 2), 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 CO₂ output values being within +/- 2% of the reported value from the CEMS system for the natural gas-fired units. Also, the alternative quantification methodology average daily CO₂ agreement over the twelve (12) day coal burn test period was within +/- 1% 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 a limited level of assurance verification. 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 five (5) natural gas-fired facilities with generation units audit-sampled (representing 14 total gasfired units targeted), under this verification program, monthly and annual natural 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 +2.6% difference for the five (5) facilities, with only two (2) of those facilities exhibiting a deviation greater than +/-2% (a major outage at Nelson, and the Unit 6 start-up at Ninemile Point, during 2014 may have contributed to higher auxiliary boiler usage than normal at those two facilities). 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 Entergy's small, natural gas-fired combustion sources' fuel use included in the Gas Burn database data, but not captured in the EPA AMPD database), 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 thirteen (13) 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 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 from these process monitoring systems were supplied on a monthly basis, for fuel flow, heat input (MMBtu), and power generation (MW-hr), for eighteen (18) of the nineteen (19) audit-sampled units. The results of these cross-checking comparisons between the two datasets showed the individual units having an average deviation of -0.8% for the five (5) coal-fired units, with none of the coal units' deviations being greater than +/-10%. For the thirteen (13) gas units with PM&D data, the individual unit deviations between the two data sets showed an average deviation of -0.3%, with only one (1) unit having a deviation greater than +/-10% (excluding that one unit, the average deviation for the other twelve (12) natural gas-fired units was +0.8%). 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, especially when considering the operational/maintenance characteristics of the PM&D process monitoring system data used in this validation check.

• For the three (3) units with hourly data supplied by Entergy (Sabine Units 3-5), from the plants' on-site DAHS computer database archive systems, these hourly, "raw" data sets agreed with the final EPA-approved AMPD database 2014 annual results to within 0.04 to 0.07% for each of the three (3) units. Such a low QA/QC adjustment of raw data throughout the 2014 reporting year is a further indicator of the reliability of Entergy's reported CEMS data.

Through the course of the verification, the data management systems and controls employed in the quantification of emissions for Entergy were reviewed, as detailed in the Verification 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 500 of our approximately 5,000 employees are dedicated climate change specialists, with experience advising public and private-sector clients. ICF International has earned a 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.

Over the past ten years, ICF International has carried out numerous facility-level GHG verifications and verifications of emissions reduction projects. ICF's Verification Body 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.

ICF has assembled a Verification Team consisting of experienced GHG verifiers and relevant technical experts.

Verifiers

Julie Tartt has a Bachelor of Science degree in Environmental Sciences from the University of Guelph and has completed supplementary verification training, receiving a certificate of training for ISO 14064. Julie is the Manager of ICF's Verification Management System (VMS) and is also a Lead Verifier – she led and managed the development of ICF's ANSI-accredited ISO 14065 VMS. She has considerable experience and expertise quantifying greenhouse gases through her work developing numerous GHG inventories, and verifying GHG emissions. Julie has been working with ICF's Verification Body since 2010 and has worked on verifications under several regulatory reporting programs including British Columbia, Ontario, and Quebec's Greenhouse Gas Reporting Regulations, and Alberta's Specified Gas Emitters Regulation. Facility compliance reports verified have included natural gas pipeline and natural gas processing linear facility operations, coal mining, electricity generation, and cogeneration facilities. Emissions

reduction project verifications have included wind electricity generation, landfill gas capture and utilization, aerobic composting, and tillage management projects. Additionally, she has provided verification services for organizations reporting to the Carbon Disclosure Project and The Climate Registry, as well as voluntary emissions reductions projects. Julie also has extensive experience managing and administering large, multi-client, carbon market modeling and analysis studies nationally and at the provincial level.

Kevin Johnson (Cventure LLC) has over 30 years energy and environmental consulting experience, focusing over the last half of his career on verification, greenhouse gas and CO2 emissions inventories, carbon offset projects, and sustainability programs. In 2005, he founded Carbon Solutions, Inc., an independent consulting services firm, and in 2007 co-founded Cventure LLC. While a contractor for ERT-Winrock in 2008-9, he served as project manager for several GHG emissions reduction credit ("ERC") protocol development and verification projects, as well as corporate GHG inventory verification projects, and drafted the verification guidelines for the American Carbon Registry. He was also a primary author of the ERT Corporate GHG Verification Guidelines, and has performed dozens of verification projects for over a decade. At Cventure, he has also performed CDP reporting benchmarking, and ISO 14064 and GRI sustainability reporting gap analyses, for several commercial clients. Prior to forming Carbon Solutions, Inc., he previously served as the leader of URS Corporation's corporate GHG/climate change practice. Some of his other project management experience includes corporate strategy development, offset project assessments and feasibility studies, GHG emission inventories/protocols and verification, environmental management information system implementations, and ERC verification and trading support. Some climate change clients include Entergy, Exelon, Eni, El Paso, Google, Wal-Mart, Bloomberg LP, NewsCorp, Marathon, 21st Century Fox, Unocal, T. Rowe Price, Conoco, Compuware, PetroSource, Kimco Realty, BlueSource, Anadarko Petroleum, Albertsons, US Energy Biogas, EDF, U.S. DOE, GRI, U.S. EPA, and several independent oil producers.

Mabel Fulford is an Associate in ICF's Energy, Environment and Transportation Division, and has a strong academic background in global energy systems, combining technical, economic and policy subjects. As an Associate Verifier at ICF, Mabel has worked on both voluntary and compliance verifications within the jurisdictions of British Columbia, Alberta, Ontario, Quebec, California and Brazil, in addition to a variety of consultancy projects concerning greenhouse gas quantification and energy efficiency. She holds a BEng in Chemical Engineering from McGill University, a MSc in Sustainable Energy Futures from Imperial College London and a MASc in Chemical Engineering from the University of Toronto, and has completed supplementary verification training, receiving an ICF certificate of training for ISO 14064. Mabel is a skilled researcher with extensive experience in energy modeling, primary data collection, data analysis, and technical and non-technical writing. She has previous experience supporting projects involving smart grid technologies, energy efficiency, small renewables and working with state/provincial government carbon initiatives. Mabel is bilingual (English/French), and has current H₂S Alive, WHMIS and First Aid certifications.

Andrew Pettit, an Analyst with ICF International's Climate Change and Sustainability division, graduated with a Bachelor of Arts degree in Environmental Geography from Colgate University. Andrew has approximately four years of greenhouse gas quantification experience through his support of greenhouse gas inventory development projects in the commercial, academic, federal and international arenas. Since his inception at ICF, Andrew has supported the annual development of greenhouse gas inventories and Carbon Disclosure Project responses for a number of commercial clients, including ICF International. Through this involvement, Andrew has become intimately familiar with the methodologies behind calculating greenhouse gas emissions from facility energy consumption, air travel, vehicle fleet fuel consumption, refrigerants, and commuting. Andrew's has also maintained a crucial role in the development of the Inventory of U.S. Greenhouse Gas Emissions and Sinks' Energy Sector emission estimates since 2011. Andrew is a LEED Green Associate.

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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 ninth day of March, 2015.

Duncan Rotherham

Vice President

ICF International

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Appendix

Verification Plan



Verification Plan

Entergy Corporation

1 Introduction

This document provides details on the verification scope and process that is planned to conduct a limited level verification of the 2014 organization-wide GHG inventory ("GHG Assertion") for Entergy Corporation ("Entergy"). The GHG Assertion made by Entergy requires the quantification of the emissions produced during calendar year 2014, and related primarily to stationary combustion of fossil fuels and from purchased power, as well as from a number of minor sources. An overview of operations for the organization will be provided in the Verification Report.

A Verification Risk Assessment was conducted during the verification planning stage; the results of which will be provided in Section 6 of this document. Additionally, the results of the Risk Assessment informed the development of the Sampling Plan.

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, and any external users of Entergy's public GHG reporting, 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 LLC 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 within the Verification Statement.

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 designed to provide a limited level of assurance.

The Verification and Sampling Plans were developed based on the relevant criteria described in the following:

• The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, Revised Edition, World Resources Institute and World Business Council for Sustainable Resource Development, March 2004

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

Scope Element	ISO 14064-1 Definition
Boundary	The organization's corporate-wide 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 applies to Entergy's GHG Assertion are described below.

Boundary

During the initial verification planning, the organizational boundaries and the sources which would be required to be included in the emissions inventory quantification will be reviewed. The procedures to review the GHG Assertion will be designed to support a *limited level* of assurance. These procedures will systematically review:

- the emissions sources included in the quantification procedures;
- the methodologies 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/WBCSD GHG reporting protocols.

Infrastructure and Activities

According to Entergy's website¹, "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,

Accessed on December 22, 2014 at http://www.entergy.com/about_entergy/

Louisiana, Mississippi and Texas. Entergy has annual revenues of more than \$11 billion and approximately 14,000 employees."

GHG Sources

The following key sources comprise the 2014 GHG inventory categorized by Entergy as follows:

Entergy Category	Emissions Source Category	Corporate Emissions Source	GHGs Included
	Stationary Combustion	Power Generating Units	CO ₂ , CH ₄ , N ₂ O
		Small Stationary Combustion	CO ₂ , CH ₄ , N ₂ O
	Mobile Combustion	Corporate Fleet	CO ₂ , CH ₄ , N ₂ O
Direct Emissions		Natural Gas T&D	CH ₄
	Fugitive Emissions	Electricity T&D	SF ₆
		Cooling/Air-Conditioning (building, mobile)	HFCs
Indirect Emissions	Purchased Electricity	Purchased Power for Business Operations Outside Entergy Service Territory	CO ₂ , CH ₄ , N ₂ O
Optional Emissions Sources	Purchased Power (Controllable)	Controllable Purchased Power Sold to Customers	CO ₂ , CH ₄ , N ₂ O
	Product Combustion	Combustion of Natural Gas Distributed to Customers	CO ₂ , CH ₄ , N ₂ O
	Employee Commuting		CO ₂ , CH ₄ , N ₂ O

GHG Types

The emissions accounted for in the assertion include the following greenhouse gases:

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Sulphur Hexafluoride (SF₆)

Neither Perfluorocarbons nor Nitrogen Trifluoride are included in Entergy's inventory given the nature of its business and that these classes of chemicals are not used in any of Entergy's operations in any sizeable amount.

The final inventory will be expressed in both short tons of CO₂ equivalent emissions ("CO₂e"), as well as in metric tonnes CO₂e.

Reporting Period

The GHG Assertion covers the 2014 calendar year, from 1 January 2014 through 31 December 2014, 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.

A materiality threshold for this limited level of assurance verification was set at 10% for the corporate inventory.

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

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." The de minimus label for emissions sources <1% of the total inventory was selected by Entergy to delineate a threshold for inventory quantification. Sources that fall within the de minimus category can re-use an emissions estimate for up to five years before having to re-calculate the emissions. Note that de minimus sources (as defined by Entergy) are still included in the total inventory quantification, they are just not recalculated every year.

2.5 Principles

ISO 14064 defines five 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-related information. 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 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 GHG inventory boundary are included within an identified source category.

Consistency

Uniform calculations are employed between the base year (i.e., year 2000 emissions, for establishing Entergy's baseline emissions levels from which past, and current, GHG emissions reduction target commitments have been made), and current accounting/reporting periods (e.g., years 2010-2020, 2nd period reduction target commitments, also defined in terms of a year 2000 baseline). Emissions 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 are used while maintaining the principles of conservativeness and transparency.

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.

2.6 Limitation of Liability

Due to the complex nature of the organization's operations 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 500 of our approximately 5,000 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.

For this verification, ICF assembled a Verification Team consisting of experienced GHG verifiers and relevant technical experts. The roles of the Verification Team and Internal Peer Reviewer are provided below, followed by relevant bios.

Lead Verifier

The Lead Verifier is responsible for all activities conducted within the verification, including overseeing the development of the Verification and Sampling Plans and the execution of the verification procedures. The Lead Verifier is the lead author of the Verification Report and executes the Verification Statement at the conclusion of the engagement.

Verifiers

The Verifiers work with the Lead Verifier to conduct the verification procedures.

Technical Experts

The Verification Team is supported by Technical Experts, who review the Verification Risk Assessment and provide advice on the development of the Verification and Sampling Plans to ensure risks are addressed with rigorously designed verification procedures. The Technical Experts are also available to the Verification Team through the course of the verification to provide assistance with any issues as they arise.

Internal Peer Reviewer²

The Internal Peer Reviewer is not a member of the Verification Team and does not participate in the verification until the draft Verification Report and draft Verification Statement have been prepared. The Internal Peer Reviewer conducts an internal assessment of the verification to ensure the verification procedures have been completed, the results of the verification have been thoroughly documented, any issues or discrepancies have been investigated and the verification evidence is sufficient to reach the verification conclusion described in the Verification Statement.

Lead Verifier

Julie Tartt has a Bachelor of Science degree in Environmental Sciences from the University of Guelph and has completed supplementary verification training, receiving a certificate of training for ISO 14064. Julie is the Manager of ICF's Verification Management System ("VMS") and is also a Lead Verifier – she led and managed the development of ICF's ANSI-accredited ISO 14065 VMS. She has considerable experience and expertise quantifying greenhouse gases through her work developing numerous GHG inventories, and verifying GHG emissions. Julie has been working with ICF's Verification Body since 2010 and has worked on verifications under several regulatory reporting programs including British Columbia, Ontario, and Quebec's Greenhouse Gas Reporting Regulations, and Alberta's Specified Gas Emitters Regulation. Facility compliance reports verified have included natural gas pipeline and natural gas processing linear facility operations, coal mining, electricity generation, and cogeneration facilities.

² Note: the Internal Peer Reviewer is not a member of the Verification Team, but is listed here to keep the list of personnel involved in the engagement in one place.

Emissions reduction project verifications have included wind electricity generation, landfill gas capture and utilization, aerobic composting, and tillage management projects. Additionally, she has provided verification services for organizations reporting to the Carbon Disclosure Project and The Climate Registry, as well as voluntary emissions reductions projects. Julie also has extensive experience managing and administering large, multi-client, carbon market modeling and analysis studies nationally and at the provincial level.

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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. 2. 3. 4. 5.	Selection of Lead Verifier Initiate Conflict of Interest Procedure Pre-Engagement Planning Contract Execution Initiate Verification Tracking	 Selection of Verification Team Communication with Client/Responsible Party Kick-off Meeting Assess GHG Program & Revise Procedures as Required Draft Verification and Sampling Plan Verification Risk Assessment 	 12. Site Visit 13. Conduct Verification Procedures 14. Issue Clarification & Data Request 15. Revise & Finalize Verification and Sampling Plan 16. Address and Evaluate Outstanding Issues 	 Evaluate Evidence Hold Verification Findings Meeting (if necessary) Draft Verification Report & Statement Internal Peer Review Issue Verification Report & Statement Close Verification File Develop and Issue Management Memo

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 Corporation (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 its facilities 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 involved 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 emissions 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.

The results of the Verification Risk Assessment inform the development of the verification procedures, which will be documented in Section 7 of this document, and a summary of the Verification Risk Assessment will be provided in Section 6. The Verification and Sampling Plans as well as the Verification Risk Assessment will be reviewed by ICF's designated Technical Experts to ensure the verification procedures address each of the risks identified. The draft Verification Plan will be provided to the Responsible Party before proceeding with the verification.

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 Julie Tartt and Kevin Johnson from January 12-14, 2015 inclusive in Texas and Louisiana. The site visit will be a key step in the planning and execution of the verification. During the course of the site tour, ICF will interview key operations personnel regarding the operations and data management of the Responsible Party.

During the course of the site visit, ICF will:

- a) interview key site operations personnel regarding the operations and data management of a large natural gasfired generation facility (Sabine Gas Plant in Texas) to cross-check GHG data as well as gain a deeper understanding of GHG information systems and controls at plant level
- b) undertake discussions with the Intra-System Billing ("ISB"), TRADES, Coal Supply, Gas Supply, Performance Monitoring and Diagnostics ("PM&D") Unit, CEMS Unit, Metered Data Management/Operations IT, and MISO transactions/reconciliation (all of these in the Woodlands, TX), as well as Generation and Fuel Accounting systems (in New Orleans, LA), regarding data which they supply for purposes of the GHG Assertion, as well as related data and information management systems

Key Entergy personnel to be interviewed on-site will include:

- Rick Johnson, Manager, Corporate Environmental Operations (based in New Orleans but accompanying the ICF team during this trip)
- Don Lierman, Sabine Gas Plant
- Grady Kaough, TRADES
- Charles John, ISB
- Ryan Trushenski, MISO data download and reconciliation

- David Sommers, Gas Supply
- Tad Chenet and Minh Nguyen, CEMS Information
- Stanley Jaskot and KT Huang, PM&D
- Melissa Lejeune and Shannon Breaux, Generation and Fuel Accounting
- Karen Radosivich, Ryan Plaisance, and Victoria Langley, Meter Data Management/Operations IT/PCI System
- David Bruess, Chris Stokley, Al Rolston, and Scott Marino, Fuel Data Management

During the site visit all major GHG emissions sources for the Sabine plant 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 facility, collection of relevant data and confirmatory checks (as possible) on meters and other equipment.

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 Section 7, the Verification Team will review three 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, i.e., those data systems used to capture and manage the GHG-related data and to calculate the GHG Assertion, will also be assessed by the Verification Team as part of this review.

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

- TRADES controllable power purchases tracking system: hourly purchase amounts from 1/1/2014 to 12/31/2014 inclusive will be extracted and sent via Excel to ICF by Grady Kaough (via Rick Johnson)
- Generation and Fuels Accounting Monthly purchased power totals for 2014 are to be sent to ICF by Melissa Lejeune, Shannon Breaux, and Jessica Landry (via Rick Johnson)
- 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 David Sommers: purchase amounts inputed into ISB
- Coal purchases data from Scott Marino (solid fuels): purchase amounts inputted into ISB
- ISB purchased power data to be sent by Charles John

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 sought 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 Section 7 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 GHG inventory boundary, including a review of the completeness of emissions 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 have 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 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, to be used for reporting purposes by 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 was planned for the verification (subject to change with agreement between the Verifier and the Responsible Party).

Description	Scheduled Date
Verification Kick-Off Meeting	December 5, 2014
Draft Verification Plan to Responsible Party	December 23, 2014
Preliminary Data Requests	January 9, 2015
Site Visit	January 12-14, 2015
Initial GHG Assertion Clarification Request	February 13, 2015
Draft Verification Statement and Report	March 4, 2015
Final Verification Statement and Report	March 6, 2015

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 ensured a thorough treatment of any risk identified, including determination of magnitude and sensitivity of that risk, during the assessment process. A qualitative risk assessment was 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 2014 GHG Assertion emanates 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, oil and coal plants used in the process, and a smaller amount of controllable 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. For the large CEMS-equipped generation units, because there are so many of them in Entergy's system (~50 units with significant operations in 2014), there would have to be multiple, long duration control failures to create errors which could lead to a material misstatement of Entergy's entity-wide inventory. For example, in the 2010 case of two highly unusual CEM system failures, which each went undetected for several months, while they affected 2010 GHG emissions of each unit by 5-10%, their collective impact on Entergy's overall 2010 corporate GHG inventory was less than 1%. The inherent risk has been assessed to be medium, based in large part on the sheer magnitude of Entergy's GHG footprint.

Control risk relates to the likelihood that a material misstatement in the 2014 GHG Assertion will not be prevented or detected by Entergy's internal control and data management systems. Control risks were assessed primarily by reviewing data controls and management systems for large fossil generating units and controllable purchased power, both comprising in aggregate approximately 95% of total company-wide emissions reported in the 2014 GHG Assertion. This percentage has remained relatively consistent over the last few years. The largest control risk in relation to the 2014 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; this is true for all emissions sources including the largest ones, namely stationary combustion and controllable purchased power). For purchased power, a number of data systems (such as TRADES and non-controllable gas- and coal-fired power 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 OA/OC checks numerous times, on a monthly and on an annualized basis. The Verification Team will request data directly from ISB for 2014, and will then cross-check it with data from TRADES and other sources for confimartory checks. For all of the large, CEMS-equipped fossil fuel electric generation units, which contribute approximately 85% of the total 2014 GHG emissions inventory, Entergy is subject to very rigorous measurement, monitoring, and reporting ("MMR") requirements established by the U.S. EPA. The CEMS MMR program, and its associated robust 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 the CEM systems are well established technologies with demonstrated track records of accuracy, precision, and reliability. In light of the abovementioned reasons, the control risk is assessed 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* risks, which are typically attributes of the organization and 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 adequate supporting information. ICF will conduct a number of sampling tests, focused on large fossil electric generation units and controllable purchased power. These tests are outlined in the sampling plan. Overall, the Verification Team's procedures have been designed to minimize detection risk. Our initial assessment is that detection risk will likely be low (in line with previous years' verification exercises), given the large number and appropriateness of the verification sampling/checking tests which are focused on the largest GHG inventory segments, i.e., CEMS units and power purchases (by relative magnitude), of Entergy's 2014 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, with particular focus on the manual parts of the process.

7 Verification Procedures (Sampling Plan)

Summary of Procedures:

Organization Boundaries and Definition

B1: Organization Boundaries, Infrastructure and Activities

Calculation

C1: True Up and Re-Performance Calculations

C2: Minor/De Minimus Emissions – Methodology and Documentation

Data Sources and Supporting Data

D1: Data Collection and Quality Controls

D2: Data Confirmation against External Sources

D3: Data Migration into Inventory

Assertion

A1: Final Verification Assessment

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			
direct emission satisfies the princ	ciple 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 <i>Data Sources</i> 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, or		
	Transparency.		
Specific Activities	In bullet form;		
	The Specific Activities are outlined here.		
Error Conditions	The anticipated <i>Error Conditions</i> 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.		

Facility Boundaries and Definition

B1 – Organization Boundaries	s, Infrastructure and Activities		
Introduction: This procedure eva	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	GHG Inventory Management Plan and Reporting Document (IMPRD), GHG		
	Assertion, Previous GHG Assertions, Entergy Personnel, 10-K, Annual Reports,		
	Corporate Statistical Report		
Objective (specific principles)	Completeness, Consistency		
Specific Activities	 Compare the GHG emission sources listed for the organization in the GHG Assertion against GHG emission sources listed in previous GHG Assertions; Compare the GHG emission sources listed for the organization in the GHG Assertion against relevant annual reports, 10-K submissions, statistical report, and Entergy's website regarding operations and assets for completeness; Compare the GHG emissions sources listed for the organization in the GHG Assertion against observations and discussions during site tour for completeness; Interview Entergy personnel regarding changes to inventory or changes in the organization that have occurred in the current reporting period; Interview relevant Entergy personnel regarding completeness of inventory described in the GHG Assertion; Compare total emissions for each GHG emissions source in the current period against prior periods; 		
	7. Evaluate the appropriateness and quantification of any <i>de minimus</i>		
	emission sources.		
Error Conditions	GHG emission sources that are not reported in the GHG Assertion.		

C1 – True Up and Re-Performance Calculations

Introduction: As part of verification procedures, ICF checked calculations for each emissions source, with an emphasis on large stationary fossil plants (CEMS units), and controllable purchased power which together comprise over 95% of total corporate-wide GHG emissions for 2014. 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.

Entergy.	
Type of Evidence	Documentation, Re-performance
Data Sources	Large stationary fossil plants: a. Selected CEMS reports, 19 in total (from Tad Chenet/Minh Nguyen; the plant site visit contact at Sabine; and the PM&D group); sampling is at the smallest units corresponding to ~1% of total direct emissions (~0.5% of total ETR emissions), expected to represent in total approximately 63% of Entergy power generation direct emissions. These are: Coal Independence 1 Independence 2
	 RS Nelson 6 White Bluff 1 White Bluff 2
	 Little Gypsy 1 Little Gypsy 2 Little Gypsy 3 Michoud 2 Michoud 3 Ninemile Point 3 Ninemile Point 4 Ninemile Point 5 RS Nelson 4 Sabine 1 Sabine 2 Sabine 3
	Sabine 4Sabine 5

	b. Coal purchasing (Scott Marino) and one (1) short-term test burn	
	data for one (1) coal plant.	
	c. Gas purchasing (Dave Sommers) gas burn data – all plants – monthly basis.	
	d. Plant performance monitoring and diagnostics (PM&D) data:	
	monthly fuel use, boiler heat input, and gross power generation	
	for 18 of the 19 auditing sample selected units.	
	 e. CEMS supporting documentation and QA/QC back-up data for selected audit sample units. 	
	selected addit sample units.	
	2. Purchased power (controllable) {Scope 3}:	
	a. Controllable trades (on daily basis from 1/1/2014 to 12/31/2014	
	from Grady Kaough) from TRADES (Excel).	
	b. Total purchased power (monthly basis from January to December	
	2014) from Generation and Fuels Accounting (Shannon Breaux).	
	c. ISB purchased power by operating company and counterparty/contract daily transactions information (Excel) from	
	Charles John.	
	3. Purchased Power for business operations outside Entergy service territory	
	{Scope 2}:	
	Electricity consumption for five nuclear generating stations based on 2013	
	consumption.	
	4. All other emissions sources are small (accounting for approximately 5% of	
	Entergy's total inventory). These sources are reviewed through Verification	
	Procedure C2: Minor/De Minimus Emissions - Methodology and	
Ohio ations (and aifing painting)	Documentation.	
Objective (specific principles) Specific Activities	Accuracy, Transparency	
Specific Activities	General 1. Review documentation for completeness	
	2. Re-calculate emissions	
	3. Perform checks	
	Emissions Factors	
	4. Calculate emissions from each emissions source category from each	
	sampled Facility	
	5. Confirm and re-calculate (if applicable) emissions factors against	
Error Conditions	independent reference material General	
Entor Conditions	Disagreement between calculated and reported values	
	 Disagreement between allocated values or inconsistent methodology 	
	Emissions Factors	
	Incorrect or out of date emissions factors	
Sample Unit	Large Stationary Fossil Plants:	
	a. 19 units selected for sampling in relation to PM&D data (request sent to	
	Stanley Jaskot) and EPA CAM checks, representing ~53% of total Entergy	
	corporate emissions, and ~64% of Entergy's power generation direct emissions levels, including:	
	Coal Units	
	• Independence 1	
	Independence 2	
	RS Nelson 6	
	White Bluff 1	
	• White Bluff 2	

Gas Units

- Little Gypsy 1
- Little Gypsy 2
- Little Gypsy 3
- Michoud 2
- Michoud 3
- Ninemile Point 3
- Ninemile Point 4
- Ninemile Point 5
- RS Nelson 4
- Sabine 1
- Sabine 2
- Sabine 3
- Sabine 4
- Sabine 5

For the selected units ICF requested the following unit-specific, reported data from a query of the PM&D database of historical data, for calendar year 2014:

- 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, or to the Entergy site visit environmental contact:

Coal

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

<u>Gas</u>

- Little Gypsy 1
- Little Gypsy 2
- Little Gypsy 3
- Michoud 2
- Michoud 3
- Ninemile Point 3
- Ninemile Point 4
- Ninemile Point 5
- RS Nelson 4
- Sabine 1
- Sabine 2
- Sabine 3
- Sabine 4
- Sabine 5

For each of the above CEMS-equipped gas or coal-fired units, ICF requested the following information for calendar year 2014:

- Gas flow meter accuracy test/CEMS gas flow transmitter calibration analysis (gas-fired units)
- CO₂ and stack gas flow meter CEMS relative accuracy test audit (RATA) annual test results (coal-fired units)
- CO₂ CEMS quarterly linearity checks (coal-fired units)
- ECPMS (emissions collection and monitoring plan system) feedback reports: Q1 Q4

For the gas units at Sabine, ICF requested similar information as above from the respective environmental manager on site, including hourly CO₂ data for 2014 from the Sabine on-site CEMS data acquisition and handling systems (DAHS), for Units 3-5.

With regard to verification data sampling for cross-checks of stationary combustion CEMS data, as reported in Entergy's 2014 GHG inventory, the respective sampling targets and associated data samples collected were based primarily on:

- statistical significance of the samples collected;
- a strategic design, for garnering efficiencies; and
- select targeting of specific, individual plants/units for testing the effectiveness of Entergy's controls.

The selection of individual Entergy power generation units for detailed sampling was based on a strategic, stratified design which focused on:

- Largest GHG emitting facilities
- Fewest number of individual power generation units involved
- Readily available data (i.e., Entergy-operated facilities only)
- On-site field survey strategically located geographically with regard to other data collection meetings

This resulted in nineteen (19) Entergy units selected for detailed, verification data sampling (5 coal units and 14 natural gas units). These 19 units sampled represented over 60% of the direct combustion emissions from stationary generation sources, and over 50% of Entergy's total corporate GHG emissions. EPA CAM AMPD database query reports for monthly/annual CO₂ emissions and boiler heat input data were generated for all of those units sampled. Along those same lines, for CEMS RATA data sampling and review, an additional thirteen (13) natural gas-fired units were also sampled, to improve the overall relative accuracy assessment of Entergy's entire fleet of natural gas-fired generation CEMS units.

Overall the sampling plan design was based primarily on statistical significance, however, the design also incorporated some targeted sampling of specific plants/units for specific testing of Entergy's controls. Some examples of this testing for the effectiveness of Entergy's controls included the following:

- White Bluff 2 coal burn test data (only data available for 2014, as White Bluff 1 was down during that test; RS Nelson had an outage during the coal pile inventory measurement program; and coal burn data not available for Independence)
- Sabine 3-5 hourly CEMS data review, and alternative methodology calculation review cross-checks (multiple, large units with significant 2014 operations; part of the on-site, generation plant survey visit)

	 18 of the 19 total units sampled had heat input validation data available from PM&D All of the 14 natural gas-fired units sampled enabled heat input validation with gas burn data from the Gas Database 	
	This combination of strategic targeting and testing of Entergy's controls effectiveness resulted in the completion of the sampling plan.	
	 2. Purchased Power (controllable): a. All controllable trades (daily) extract in Excel from ISB b. Emissions totals for total purchased power on monthly basis 	
Sample Size	 19 Large stationary fossil plants All purchased power (controllable) 	

C2 – Minor/De Minimus 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 de minimus emission sources have been appropriately excluded.		
Type of Evidence	Documentation, Discussions with Entergy's Environmental Manager	
Data Sources	2014 GHG Assertion, IMPRD	
Objective (specific principles)	Accuracy, Transparency	
Specific Activities	Review minor/de minimus sources and discuss with Entergy	
	Environmental Manager	
	2. Re-calculate emissions	
	3. Compare to 2013 inventory	
Potential Error Conditions	Material emissions source(s) improperly represented or excluded from GHG	
	Assertion	
Comple Unit	N/A	
Sample Unit		
Sample Size	Minor/de minimus emission categories and sources	

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, Entergy personnel, Standard Operating Procedures		
	and Manuals		
Objective (specific principles)	Completeness, Consistency, Accuracy, Transparency, Conservativeness		
Specific Activities	Observe or interview Entergy personnel regarding the operation of data		
	transfer systems, including manual data entry procedures and associated		
	controls;		
	2. Review or interview Entergy personnel regarding on-site sampling,		
	laboratory and other analytical procedures;		
	3. Compare original data sources to data in calculation systems for		
	consistency.		
Error Conditions	Inconsistency between raw data and data supporting the 2014 GHG		
	Assertion		
	Inconsistency and/or unclear links between information management		
	systems that are of the most relevance to the underlying data for the 2014		
	GHG Assertion		

D2 – Data Confirmation against External Sources		
Introduction: Where possible, this verification procedure is used to provide gather external evidence to confirm		
data sources used to quantify reported emissions.		
Type of Evidence	Confirmation, Analytical Procedures	
Data Sources	Inventory Report and supporting external data/information:	
	1. <u>Large fossil generating stations</u> :	
	a. PM&D data – monthly (all 12 months for 2014).	
	b. CEMS data – ECMPS reports (for 19 gas and coal-fired units	
	(representing ~63% of Entergy power generation direct emissions,	
	and ~54% 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 2014); one set of select daily burn data for White Bluff plant.	
	d. All CEMS-related QA/QC documentation for Sabine units, and	
	hourly CO ₂ data for Units 3-5.	
	2. Small Stationary Combustion Sources – 2013 EPA GHG Reporting	
	Program (Subpart C) data submitted for all fossil generating stations	
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	
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 18 units (representing ~54% of total Entergy
	corporate-wide GHG emissions).
	b. CEMS data – ECMPS reports – for 19 gas and coal-fired units
	(representing ~63% of Entergy power generation direct emissions,
	and ~54% of total Entergy corporate-wide GHG emissions).
	c. Gas and coal burn data – monthly (all 12 months for 2014) – for all
	gas units, and one set of select daily data for White Bluff plant.
	d. All CEMS-related QA/QC documentation for all Sabine units, and
	hourly DAHS CO ₂ emissions data for Sabine Units 3-5.
	2. Small stationary combustion sources – all 2013 EPA GHG Reporting
	Program Subpart C submissions and supporting data

D3 – Data Migration into Inventory		
Introduction: This procedure is intended to review the transfer of data from calculations into the final GHG		
Assertion, including any summary calculations that were required.		
Type of Evidence	Documentation, Re-Performance	
Data Sources	GHG Assertion, IMPRD, discussions with Entergy's Environmental Manager	
Objective (specific principles)	Accuracy, Transparency	
Specific Activities	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	

Assertion

A1 – Final Verification Assessment		
Introduction: This procedure is intended as a final review of Entergy's 2014 GHG Assertion to ensure all		
required information is complete	and all relevant documentation is included.	
Type of Evidence	Documentation	
Data Sources	GHG Assertion	
Objective (specific principles)	Completeness	
Specific Activities	 Review GHG Assertion and IMPRD for completeness and current information; Provide Responsible Party with documentation, namely a verification 	
	statement and report for voluntary reporting purposes.	
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	