Report

2011 Greenhouse Gas Emissions Verification Report

City of Shasta Lake
Shasta Lake, California

Prepared for:

City of Shasta Lake

September 1, 2012

Project No. 29061-12

Locus TECHNOLOGIES

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CITY OF SHASTA LAKE
2011 GREENHOUSE GAS VERIFICATION REPORT

1. ENTITY OVERVIEW

1.1. Entity Description

The City of Shasta Lake purchases electricity to sell to residential, industrial, and commercial end users in Shasta Lake, California. The City of Shasta Lake qualifies to report as a Retail Provider and is subject to the requirements in Section 95111. The neighboring city, Redding, acts as Shasta Lake's scheduler. All power imported is not reported by the City of Shasta Lake as seen in NERC e-tags. E-tags associated with applicable power transactions only document Redding as a Purchasing-Selling Entity (PSE).

The City of Shasta Lake does not produce any power and does not need to report as an electricity generating facility under Section 95112.

The City of Shasta Lake owns substation equipment that contains SF_6; however, emissions associated with this activity are not applicable to reporting according to 95101(f)(8).

This entity reports their Greenhouse Gas (GHG) emissions to the California Air Resources Board as an electricity entity, subject to the requirements in section 95111 of the regulations in addition to the general requirements in sections 95100 - 95109. The City of Shasta Lake does not produce any product required to be reported under 95103(l).

1.2. Data Acquisition and Calculation Methodologies

The City of Shasta Lake receives transaction information from Redding via monthly invoices. No e-tags are routinely provided; however, for the purposes of this verification, they were provided by Redding. As the e-tags show that the City of Shasta Lake does not import any power, no emissions are calculated by this entity.

The City of Shasta Lake does report retail sales and is properly classified as a Retail Provider reporting only non-confidential retail sales. Retail sales information is available in monthly and annual summaries. All retail sales are determined by meters at the delivery point and are totaled by customer category. Reported retail sales exclude any line losses. These losses are seen as the difference between purchased power and delivered power (approximately 3.07% for 2011). Expected losses range between 3 – 7% for the City of Shasta Lake based on historical analyses.

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1.3. Data Checks Summary

A listing of documents reviewed for this verification, specific data checks, and findings of the final report are provided in the table below.

Source/Data Type	Documents Reviewed	Data Checks	Findings
General entity information	GHG Inventory Program, e-tags	Reviewed to determine entity classification and to evaluate conformance with regulations. Evaluated plan against 95105(d).	No non-conformances or misstatements identified.
Emissions imported power	Spreadsheet calculations, contracts, e-tags, invoices, WREGIS reports	Locus reviewed spreadsheet summaries to compare against reported totals. E-tags were requested (approximately 20 total reviewed) foreach of the counterparties to determine applicability for reporting by Shasta Lake. Contract for renewable power purchases were reviewed to determine location, with total transactions reviewed against WREGIS reports to confirm no out-of-state transactions.	No non-conformances or misstatements identified.
Retail sales	Retail sales summaries, billing reports	Locus reviewed summaries for definition of retail sales and compared against billing reports for totals reported.	No non-conformances or misstatements identified.

1.4. Measurement Uncertainty Assessment

There is no potential measurement uncertainty associated with the emissions from this entity as the entity is not applicable for reporting emissions. All retail sales are based on revenue meters and therefore are assumed to be accurate according to 95103(k)(7).

1.5. Missing Data Substitutions

No missing data or invalid data was identified and no missing data substitution procedures were used.

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2. MATERIALITY ASSESSMENT

2.1. Emissions

Source	Operator Reported (MT CO_2e)	Verifier Calculated (MT CO_2e)	Discrepancy (MT CO_2e)	Difference (%)
Unspecified Power Imports	0	0	0	0.00%
Specified Power Imports	0	0	0	0.00%
Power Wheeled through CA	0	0	0	0.00%
TOTAL	**0**	**0**	**0**	**0.00%**

No discrepancies were identified as the City of Shasta Lake did not import or wheel any power during 2011.

2.2. Product Data

The City of Shasta Lake does not produce any product required to be reported under 95103(l).

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3. CONFORMANCE ASSESSMENT

Locus assessed the entity's conformance to applicable regulatory methodologies and requirements in the calculation and reporting of the emissions data. Reporting as an electricity retailer, the entity is subject to the requirements in section 95111 as well as the general requirements in sections 95100 - 95109.

3.1. Description of Issues Identified

The entity corrected all non-conformance and misstatement issues identified on the Issues Log (Appendix B).

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4. SUMMARY OF FINDINGS

4.1. Verification Statement for Emissions

Free of Material Misstatement?	Conforms to the Regulation?	Verification Opinion
Yes	Yes	Positive

Based on Locus' assessment, the Entity's Emissions Data Report is free from material misstatements and conforms to the regulations.

4.2. Verification Statement for Product Data

This entity is not required to report product data, and therefore no verification statement for product data will be issued.

4.3. Additional Findings

There were no additional findings discovered during the verification of the 2011 GHG Emissions Report.

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APPENDIX A

VERIFICATION PLAN

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Verification Plan

FACILITY: City of Shasta Lake	**PROJECT NO.:** 29061
ARB FACILITY ID: 3059	**REPORTING YEAR:** 2011
LEAD VERIFIER: Christina Chang	
VERIFICATION TEAM MEMBERS: Wes Hawthorne (Independent Reviewer), Norman Wong (Verifier)	

Description of the Facility

The City of Shasta Lake purchases electricity to sell to residential, industrial, and commercial end users in Shasta Lake, California. The City of Shasta Lake qualifies to report as a Retail Provider and is subject to the requirements in Section 95111. The neighboring city, Redding, acts as Shasta Lake's scheduler. All power imported is not reported by the City of Shasta Lake as seen in NERC e-tags. E-tags associated with applicable power transactions only document Redding as a Purchasing-Selling Entity (PSE).

The City of Shasta Lake does not produce any power and does not need to report as an electricity generating facility under Section 95112.

The City of Shasta Lake owns substation equipment that contains SF_6; however, emissions associated with this activity are not applicable to reporting according to 95101(f)(8).

Training or Qualifications of Involved Personnel

Description of training/qualification of personnel involved in developing the emissions data report are described in the reporting entity's GHG Inventory Program.

Calculation Methodologies

The City of Shasta Lake receives transaction information from Redding via monthly invoices. No e-tags are routinely provided; however, for the purposes of this verification, they were provided by Redding. As the e-tags show that the City of Shasta Lake does not import any power, no emissions are calculated by this entity.

The City of Shasta Lake does report retail sales and is properly classified as a Retail Provider reporting only non-confidential retail sales. Retail sales information is available in monthly and annual summaries. All retail sales are determined by meters at the delivery point and are totaled by customer category. Reported retail sales exclude any line losses. These losses are seen as the difference between

purchased power and delivered power (approximately 3.07% for 2011). Expected losses range between 3 – 7% for the City of Shasta Lake based on historical analyses.

Data Management System

Description of reporting entity's data management system is described in the reporting entity's GHG Inventory Program.

Previous Verifications Reports

Previous verification reports for this reporting entity have been prepared by Locus.

Timeline of Events

Scheduled Completion Date	Task
25 May 2012	Verification Start Date
31 May 2012	Kickoff Call
19 June 2012	Site Visit
30 July 2012	Send issues log to reporter
30 July – 23 August 2012	City of Shasta Lake makes corrections to emissions report
28 – 30 August 2012	City of Shasta Lake discusses SF_6 applicability with ARB
31 August 2012	Completion of the Verification Report
1 September 2012	Independent Review
1 September 2012	Issue Verification Statement and Completion of Verification Services
1 September 2012	ARB deadline for submitting the Verification Statement
4 September 2012	ARB deadline extension for submitting the Verification Statement

Verification Plan

Key Data and Documents for Review

The following data and documents will need to be reviewed in order to determine applicability, compliance, and materiality of the 2011 report:

- Monthly transaction summaries
- Select monthly power purchase invoices
- Retail Sales Summaries
- Billing Reports (Retail Sales)
- WREGIS certificates
- Greenhouse Gas Inventory Program
- NERC e-tags

APPENDIX B

ISSUES LOG

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Issues Log

FACILITY: City of Shasta Lake
ARB FACILITY ID: 3059
LEAD VERIFIER: Christina Chang
VERIFICATION TEAM MEMBERS: Wes Hawthorne (Independent Reviewer), Norman Wong (Verifier)

PROJECT NO.: 29061
REPORTING YEAR: 2011

	Issue	Classification	Description	Reference	Action/Resolution	Date Corrected
1	This facility is not allowed to submit an abbreviated report	non-conformance	This facility does not qualify to submit an abbreviated report.	95103(a)	The report is no longer listed as an abbreviated report.	8/14/2012
2	Electricity Purchases/Acquisitions are not reported accurately	non-material misstatement	The City of Shasta Lake is required to report as an electric entity and does not have any associated facilities.	95101(d) 95104(d)	Electricity Purchases/Acquisitions are no longer reported.	8/14/2012
3	Power transactions are not reported using the correct methodology	non-conformance	Power transactions must be reported by first point of receipt or final point of delivery.	95111(a)(2)	The power transactions were removed from the report as they do not qualify as imported power by the reporter.	8/14/2012
4	The power purchased from Shell is not reported accurately	non-conformance material misstatement	Shasta Lake does not qualify to report as an electricity importer of this power.	95111(a)(3) 95102(a)(121)	These transactions were removed from the report.	8/14/2012
5	The power purchased from WAPA is not reported accurately	non-conformance material misstatement	Shasta Lake does not qualify to report as an electricity importer of this power.	95111(a)(4) 95102(a)(121)	These transactions were removed from the report.	8/14/2012
6	The power purchased from Whiskeytown is not reported accurately	non-conformance material misstatement	Shasta Lake does not qualify to report as an electricity importer of this power.	95111(a)(4) 95102(a)(121)	These transactions were removed from the report.	8/14/2012
7	The power purchased from REU as supplemental power is not reported accurately	non-conformance material misstatement	Shasta Lake does not qualify to report as an electricity importer of this power.	95111(a)(3) 95102(a)(121)	These transactions were removed from the report.	8/14/2012
8	Documentation needed in support of the values of imported power from Whiskeytown	non-conformance	Please provide NERC e-tags for this power.	95111(a)(9)	The reporter provided WREGIS reports, NERC e-tags, and a contract to support the amount of power from this source.	7/17/2012
9	Documentation needed in support of the values of imported power from Redding Electric Utility as supplemental power	non-conformance	Please provide NERC e-tags for this power.	95111(a)(9)	The reporter stated that there are no e-tags associated with this power. "...to the grid and outside world the REU/CYSL is one load. There are no e-tags for serving one's self."	7/3/2012
10	Documentation needed in support of the values reported for retail sales	non-conformance	Please provide documentation for retail sales.	95111(c) 95111(a)(9)	The appropriate documentation was provided.	8/15/2012
11	Retail sales are not reported accurately	non-conformance non-material misstatement	The reported includes power that was not sold as retail sales.	95111(c)(1) 95102(a)(352)	The reported value for retail sales is now correct.	8/22/2012
12	Designation of Shasta Lake as an electricity importer is incorrect	non-conformance	The City of Shasta Lake does not meet the definition of an electricity importer.	95102(a)(121)	The entity is no longer classified as an electricity importer.	8/23/2012

Original Submittal Date: 30 July 2012
Revision Number: 3
Last Revised Date: 23 August 2012

Note: This log summarizes the issues in the GHG report identified by the verification team as of the last revision date above. Any issues identified as "non-conformance" or "misstatement", if left unresolved by the verification deadline, would result in an adverse or qualified positive verification statement.

APPENDIX C

2011 EMISSION REPORT

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Certification Statement:

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: City of Shasta Lake - Electric
Facility ARB ID: 3059
Facility Reporting Year: 2011
Facility Location:
Address: 4332 Vallecito St
City: Shasta Lake
State: CA
Postal Code: 90120
County: SHASTA

Facility Site Details:
CO2 Equivalent (mtons, Subparts C-AA): 0 (excluding biogenic; does not include de minimis emissions)
CO2 Equivalent (mtons, Subparts MM-PP): 0 (does not include de minimis emissions)
Exempt Biogenic CO2 (mtons, Subparts C-AA): 0 (does not include de minimis emissions)
Cogeneration Unit Emissions Indicator: N
GHG Report Start Date: 2011-01-01
GHG Report End Date: 2011-12-31
Description of Changes to Calculation Methodology:
Description of Best Available Monitoring Methods Used:
Full or Abbreviated GHG Report? Full
Confidential Data and Other Comments:
De Minimis CO2 Emissions (metric tons):
De Minimis CH4 Emissions (metric tons):
De Minimis N2O Emissions (metric tons):
Primary NAICS Code: 921120
Second Primary NAICS Code:

Parent Company Details:
Parent Company Name: City of Shasta Lake
Address: 1650 Stanton Drive, Shasta Lake, CA 96019
Percent Ownership Interest: 100

Electric Power Entities

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Override	Override Explanation
Methane		0 (Metric Tons)		
Nitrous Oxide		0 (Metric Tons)		
Carbon Dioxide		0 (Metric Tons)		

Electricity Imports and Exports

Submission Information

Entity Name:	City of Shasta Lake
ARB Electric Power Entity ID#:	3059
Electricity Importer or Exporter?	No
Supplemental Data Category:	Retail provider (not multi-jurisdictional): reporting non-confidential retail sales only, section 95111(c)(1)
Emission Year:	2011

Submission Date:	2012-08-23
Balancing Authority Area in which Retail Customers are Located:	Sacramento Municipal Utility District
California Retail Sales, MWh:	178945
MJRP Total Service Territory Retail Sales, MWh:	0
Electrificiation (subset of retail sales), MWh:	0

Calculation of Covered Emissions

[CO2ecovered] Annual metric tons of CO2e with a compliance obligation.		[CO2eunspecified] Annual metric tons of CO2e from unspecified imported electricity calculated pursuant to MRR 95111.	[CO2especified] Annual metric tons of CO2e from imported electricity from specified sources that meet the requirements of MRR sections 95111.	[CO2especified-not covered] Annual metric tons of CO2e without a compliance obligation pursuant to section 95852.2.from specified sources that meet the requirements in MRR section 95111	[CO2eRPS_adjustment] Annual metric tons of CO2e calculated pursuant to MRR that meets the requirements of section 95852(b)(4).	[CO2 Annu CO2e expo MRR that requi sectio
0	=	0	0	0	0	

Unspecified Wholesale Power Imported to California

Sum of CO2e unsp:	0
Sum of CO2e Linked:	0

Aggregated By First Point of Receipt (POR) on NERC e-tag at, or near, the Source per 95111(a)(3) [Input First POR Code]	First POR Full Name	Transaction Start Date (Required if reporting by e-tag transaction)	Transaction End Date (Required if reporting by e-tag transaction)	NERC e-tag Code (Required if reporting by e-tag transaction)	Jurisdiction Full Name	Linked Jurisdiction, Yes/No	MWh Measured at First Point of Receipt (POR) inside California per 95111(a)(3)(A) on NERC e-tag in the Energy and Transmission Profiles, MWh Total	[TL Transm los correc factor (
								1.0

Specified Wholesale Power Imported to California

Sum of CO2e sp:	0
Sum of CO2e sp -not covered:	0
Sum of CO2e Covered and Linked:	0

Facility and Unit Name	ARB Facility and Unit ID#	If facility is un-listed, Facility Name	Aggregated By First Point of Receipt (POR) on NERC e-tag at, or near, the Source per 95111(a)(3) [Input First POR Code]	First POR Full Name	Transaction Start Date (Required if reporting by e-tag transaction)	Transaction End Date (Required if reporting by e-tag transaction)	NERC e-tag Code (Required if reporting by e-tag transaction)	Jurisdiction Full Name	Linked Jurisdicti Yes/No

Registration of RPS Adjustment Sources

RPS Adjustment:	
Default Emission Factor:	

Facility and Unit Name	ARB Facility and Unit ID#	If facility is un-listed, Facility Name	Transaction Start Date (Required if reporting by e-tag transaction)	Transaction End Date (Required if reporting by e-tag transaction)	NERC e-tag Code (Required if reporting by e-tag transaction)	Jurisdiction Full Name	Linked Jurisdiction, Yes/No	Measured at busbar, Yes/No	If n meas at busb reas why,
	0						No		

Unspecified Wholesale Power Exported from California

Aggregated By Final Point of Delivery (POD) on NERC e-tag at, or near, the Sink per 95111(a)(6) [Input Final POD Code]	Final POD Full Name	Transaction Start Date (Required if reporting by e-tag transaction)	Transaction End Date (Required if reporting by e-tag transaction)	NERC e-tag Code (Required if reporting by e-tag transaction)	Jurisdiction Full Name	Linked Jurisdiction, Yes/No	MWh Measured at Last Point of Delivery (POD) inside California per 95111(a)(6)(A) on NERC e-tag in the Energy and Transmission Profiles, MWh Total	[TL Transm los correc factor (
						No		1

Specified Wholesale Power Exported from California

Sum of CO2e sp:	0
Sum of CO2e sp -not covered:	0
Sum of CO2e Covered and Linked:	0

Facility and Unit Name	ARB Facility and Unit ID#	If facility is un-listed, Facility Name	Aggregated By Final Point of Delivery (POD) on NERC e-tag at, or near, the Sink per 95111(a)(6) [Input Final POD Code]	Final POD Full Name	Transaction Start Date (Required if reporting by e-tag transaction)	Transaction End Date (Required if reporting by e-tag transaction)	NERC e-tag Code (Required if reporting by e-tag transaction)	Jurisdiction Full Name	Linked Jurisdicti Yes/No
									No

Power Wheeled Through California

Facility and Unit Name	ARB Facility and Unit ID#	If facility is un-listed, Facility Name	Transaction Start Date (Required if reporting by e-tag transaction)	Transaction End Date (Required if reporting by e-tag transaction)	NERC e-tag Code (Required if reporting by e-tag transaction)	Jurisdiction Full Name	Linked Jurisdiction, Yes/No	MWh Measured at First Point of Delivery (POD) inside California per 95111(a)(8) on NERC e-tag in the Energy and Transmission Profiles, MWh Total	
	0						No		>:

Registration of Specified Sources (Directly Delivered)

Previously Specified Facility and Unit Name	Newly Specified Facility and Unit Name	Previously Reported Specified Facility and Unit ARB ID#	US EPA ARP	US EPA GHG	REQUIRED US EIA PLANT CODE	FERC PURPA QF	CEC RPS ID#	CEC Plant ID	CAISO Generator Resource ID	Linked Jurisdiction Facility ID (optional)	Physical address	Jur
		0										

Time And Date Report Generated: 08/23/2012 07:38