



# LRQA Independent Assurance Statement

Relating to Constellation's Greenhouse Gas Emissions Report for the Calendar Year 2023

This Assurance Statement has been prepared for Constellation Energy Generation, LLC (Constellation) in accordance with our contract.

## Terms of Engagement

LRQA was commissioned by Constellation to provide independent assurance of its greenhouse gas (GHG) emissions inventory and air emissions intensities ("the Report") for the calendar year 2023 (CY 2023) against the assurance criteria below to a reasonable level of assurance and materiality of 5% using LRQA's verification procedure and ISO 14064 - Part 3 for greenhouse gas emissions. LRQA's verification procedure is based on current best practise and is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered Constellation's operations and activities under its equity share organizational boundary and specifically the following requirements:

- Verifying conformance with:
  - World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition (otherwise referred to as the WRI/WBCSD GHG Protocol) for the GHG data, taking into consideration the Corporate Value Chain (Scope 3) and Reporting Standard <sup>1</sup>;
  - The Climate Registry General Reporting Protocol Version 3 (May 2019) for the GHG Data <sup>2</sup>;
  - The Climate Registry Electric Power Sector Protocol (EPS) Version 1.0 (June 2009) for the GHG and net generation data; and
  - EPS Protocol Updates and Clarifications (December 2020).
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
  - Direct GHG Emissions (Scope 1);
  - Indirect GHG Emissions (Scope 2) – location based and market based;
  - Scope 3 Emissions:
    - Category 3 Fuel and Energy Related Activities - Electricity Sales [PPA & Spot Market];
    - Category 8 Upstream Leased Activities – Leased Buildings;
    - Category 6 Business Travel - Air, Rail, Hotel, and Car Rental;
    - Category 11 Use of Sold Products - Equipment Operated for Others;
    - Category 11 Use of Sold Products – Natural Gas Sales;
    - Category 11 Use of Sold Products – Total; and
  - Air Emissions Intensities:
    - Carbon dioxide (CO<sub>2</sub>) emissions intensity;
    - Sulfur Dioxide (SO<sub>2</sub>) emissions intensity; and
    - Nitrogen Oxides (NO<sub>x</sub>) emissions intensity.

LRQA's responsibility is only to Constellation. LRQA disclaims any liability or responsibility to others as explained in the end footnote. Constellation's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the Report and for maintaining effective internal controls over the systems from which the Report is derived. Ultimately, the Report has been approved by, and remains the responsibility of Constellation.

## LRQA's Opinion

### Scope 1 and Scope 2 emissions and Air Emissions Intensities

Based on LRQA's approach, we believe that Constellation has, in all material respects:

- Met the requirements of criteria listed above; and
- Disclosed accurate and reliable performance data and information as summarized in Table 1 and Table 2 below.

The opinion expressed is formed on the basis of a reasonable level of assurance and at the materiality of five percent for Scope 1 emissions, five percent for Scope 2 emissions and five percent for air emissions intensities.

<sup>1</sup> <http://www.ghgprotocol.org/>

<sup>2</sup> <https://www.theclimateregistry.org/>



**Scope 3 Emissions**

Based on LRQA’s approach nothing has come to our attention that would cause us to believe that Constellation has not, in all material respects:

- Met the requirements of criteria listed above; and
- Disclosed accurate and reliable performance data and information as summarized in Table 3 below.

The opinion expressed is formed on the basis of a limited level of assurance<sup>3</sup> and at the materiality of the professional judgement of the verifier.

**Table 1. Summary of Constellation Scope 1 and Scope 2 Emissions Report for CY 2023:**

Scope of GHG emissions	Quantity	Unit
Scope 1	9,679,181	Tonnes CO <sub>2e</sub>
Scope 2 Location Based	292,891	Tonnes CO <sub>2e</sub>
Scope 2 Market Based	379,850	Tonnes CO <sub>2e</sub>
Scope 1 Biogenic	13	Tonnes CO <sub>2</sub>
Note 1: Scope 2, Location-based and Scope 2, Market-based are defined in the TCR General Reporting Protocol version 3		

**Table 2. Summary of Constellation Emissions Intensity Report for CY 2023:**

Parameter	lbs per MWh
Carbon Dioxide (CO <sub>2</sub> )	101.991
Sulfur Dioxide (SO <sub>2</sub> )	0.0006
Nitrogen Oxides (NO <sub>x</sub> )	0.009

**Table 3. Summary of Constellation Scope 3 Emissions Report for CY 2023:**

Scope 3 Category <sup>1</sup>	Quantity	Unit
Category 3 Fuel and Energy Related Activities - Electricity Sales [PPA & Spot Market]	24,922,161	Tonnes CO <sub>2e</sub>
Category 6 Business Travel - Air, Rail, Hotel, and Car Rental	5,817	Tonnes CO <sub>2e</sub>
Category 8 Upstream Leased Activities - Leased Buildings	6,203	Tonnes CO <sub>2e</sub>
Category 11 Use of Sold Products - Equipment Operated for Others	226,578	Tonnes CO <sub>2e</sub>
Category 11 Use of Sold Products - Natural Gas Sales	62,322,096	Tonnes CO <sub>2e</sub>
Category 11 Use of Sold Products - Total	62,548,674	Tonnes CO <sub>2e</sub>
Category 3 Fuel and Energy Related Activities - Indirect Biogenic from Electricity Sales	52,779	Tonnes CO <sub>2</sub>
Note 1: Scope 3 is defined in The Climate Registry General Reporting Protocol Version 3.		

<sup>3</sup> The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.



### **LRQA's Approach**

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- interviewing relevant employees of the organization responsible for managing data and records;
- auditing Constellation's data management systems to confirm that there were no significant errors, omissions or mis-statements in the Report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification; and
- verifying historical data and records back to source for the CY 2023.

### **LRQA's Standards and Competence**

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021 *Conformity assessment – Requirements for bodies providing audit and certification of management systems* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

Signed

Dated: May 20, 2024

A handwritten signature in blue ink, appearing to read 'Natali Ganfer', is written over a light blue horizontal line.

Natali Ganfer  
LRQA Lead Verifier  
On behalf of LRQA, 810 Seventh Avenue, Suite 1110  
New York, NY 10019

LRQA reference: UQA00002108/ 6659228

LRQA Group Limited, its affiliates and subsidiaries, and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

The English version of this Assurance Statement is the only valid version. LRQA assumes no responsibility for versions translated into other languages.

This Assurance Statement is only valid when published with the Report to which it refers. It may only be reproduced in its entirety.

Copyright © LRQA, 2024.