



Memorandum from the Office of the Inspector General

August 19, 2021

Rebecca C. Tolene

**REQUEST FOR FINAL ACTION – AUDIT 2021-15783 – FEDERAL SUSTAINABILITY
REPORT AND IMPLEMENTATION PLAN**

Attached is the subject final report for your review and final action. Your written comments, which addressed your management decision and actions planned or taken, have been included in the report. Please notify us when final action is complete. In accordance with the Inspector General Act of 1978, as amended, the Office of the Inspector General is required to report to Congress semiannually regarding audits that remain unresolved after 6 months from the date of report issuance.

If you have any questions or wish to discuss our findings, please contact Chasity W. Scantling, Senior Auditor, at (865) 633-7358 or Rick C. Underwood, Director, Financial and Operational Audits, at (423) 785-4824. We appreciate the courtesy and cooperation received from your staff during the audit.

David P. Wheeler
Assistant Inspector General
(Audits and Evaluations)

CWS:KDS

Attachment

cc (Attachment):

TVA Board of Directors
Buddy Eller
Robert M. Deacy
David B. Fountain
Tracy E. Hightower
Jeffrey J. Lyash
Jill M. Matthews
Donald A. Moul
Ronald R. Sanders II
Michael D. Skaggs
Kay W. Whittenburg
OIG File No. 2021-15783



Office of the Inspector General

Audit Report

To the Vice President,
Environment

FEDERAL SUSTAINABILITY REPORT AND IMPLEMENTATION PLAN

Audit Team
Chasity W. Scantling
Michael C. Cook

Audit 2021-15783
August 19, 2021

ABBREVIATIONS

E&EP	Environment and Energy Policy
EO	Executive Order
FY	Fiscal Year
OMB	Office of Management and Budget
SME	Subject Matter Expert
SRIP	Sustainability Report and Implementation Plan
TVA	Tennessee Valley Authority

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	i
BACKGROUND.....	1
OBJECTIVE, SCOPE, AND METHODOLOGY	3
FINDINGS.....	4
RECOMMENDATIONS	6

APPENDIX

MEMORANDUM DATED AUGUST 13, 2021, FROM REBECCA C. TOLENE TO DAVID P. WHEELER



Audit 2021-15783 – Federal Sustainability Report and Implementation Plan

EXECUTIVE SUMMARY

Why the OIG Did This Audit

The Tennessee Valley Authority (TVA) submitted its first Federal Sustainability Report and Implementation Plan (SRIP) to the White House in June 2010 in compliance with Executive Order (EO) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*.ⁱ Since that time, each administration has issued additional EOs that revoked all or portions of the previous administration's EOs and modified agency goals and reporting requirements. However, the requirement for TVA to file a SRIP has remained consistent through each EO. On May 17, 2018, President Trump issued EO 13834, *Efficient Federal Operations*.ⁱⁱ TVA's fiscal year (FY) 2020 SRIP was filed under the requirements of EO 13834.

The *Implementing Instructions for Executive Order 13834 Efficient Federal Operations*ⁱⁱⁱ instructs agencies to develop and submit an annual sustainability plan that summarizes actions implemented to meet the goals of EO 13834, progress results, cost savings, and the agency's strategies for continued progress and performance improvements. Based on the reputational risk of disseminating inaccurate information to the public we included an audit of TVA's Federal SRIP in our FY 2021 Audit Plan.

What the OIG Found

We found TVA did not perform procedures to validate data used to calculate nine of the ten metrics reported in the FY 2020 SRIP. TVA validated data for the greenhouse gas emissions information included in the report, but, at most, performed reviews for reasonableness for the remaining nine metrics reported and calculated by TVA's Environment and Energy Policy group or subject matter experts.

ⁱ United States, Executive Office of the President [Barak Obama], Presidential Documents, *Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance*, October 5, 2009, <<https://www.federalregister.gov/documents/2009/10/08/E9-24518/federal-leadership-in-environmental-energy-and-economic-performance>>, accessed on June 22, 2021.

ⁱⁱ United States, Executive Office of the President [Donald Trump], Presidential Documents, *Executive Order 13834 – Efficient Federal Operations*, May 17, 2018, <<https://www.federalregister.gov/documents/2018/05/22/2018-11101/efficient-federal-operations>>, accessed on December 15, 2020.

ⁱⁱⁱ Council on Environmental Quality, Office of Federal Sustainability, *Implementing Instructions for Executive Order 13834 Efficient Federal Operations*, April, 2019, <https://www.sustainability.gov/pdfs/eo13834_instructions.pdf>, accessed on December 10, 2020.



Audit 2021-15783 – Federal Sustainability Report and Implementation Plan

EXECUTIVE SUMMARY

What the OIG Recommends

We recommend TVA's Vice President, Environment:

1. Develop guidance similar to that used to calculate the Greenhouse Gas Emissions metric to help ensure consistency in the calculation of other metrics included in the SRIP.
2. Require subject matter experts to incorporate data validation steps into the review of raw data sources used to calculate metrics in the SRIP.

TVA Management's Comments

TVA management agreed with the recommendations and provided actions they plan to take to address each of our recommendations. See the Appendix for TVA management's complete response.

BACKGROUND

In 2009, President Obama issued Executive Order (EO) 13514,¹ *Federal Leadership in Environmental, Energy, and Economic Performance*, which required the Tennessee Valley Authority (TVA) to submit its first Federal Sustainability Report and Implementation Plan (SRIP) to the White House in June 2010. Since that time, each administration has issued additional EOs that revoked all or portions of the previous administration's EOs and modified agency goals and reporting requirements. However, the requirement for TVA to file a SRIP has remained consistent through each EO.

On May 17, 2018, President Trump issued EO 13834,² *Efficient Federal Operations*. TVA's fiscal year (FY) 2020 SRIP was filed under the requirements of EO 13834. This EO required each agency to prioritize actions that reduce waste, cut costs, enhance the resilience of Federal infrastructure and operations and enable more effective accomplishment of its mission in meeting a wide range of statutory requirements enacted by the Congress. These statutory requirements are related to energy and environmental performance of executive departments and agencies, including with respect to facilities, vehicles, and overall operations.

Section 7 of the EO 13834 states the head of each agency shall "report to the Chairman of the Council on Environmental Quality and the Director of the Office of Management and Budget (OMB) regarding agency implementation and progress toward the goals of the EO and relevant statutory requirements." The *Implementing Instructions for Executive Order 13834 Efficient Federal Operations*³ instructs agencies to "develop and submit an annual Sustainability Plan that summarizes actions implemented to meet the goals of EO 13834, progress results, cost savings, and the agency's strategies for continued progress and performance improvements." Based on the reputational risk of disseminating inaccurate information to the public, we included an audit of TVA's Federal Sustainability Report and Implementation Plan (SRIP) in our Fiscal Year (FY) 2021 Audit Plan.

TVA's Environment and Energy Policy group (E&EP) is the point of contact with the OMB and the Council on Environmental Quality for sustainability reporting. TVA's E&EP also leads TVA's Sustainability Program and governance structure, which includes subject matter experts (SME) and representatives from multiple

¹ United States, Executive Office of the President [Barak Obama], Presidential Documents, *Executive Order 13514 – Federal Leadership in Environmental, Energy, and Economic Performance*, October 5, 2009, <<https://www.federalregister.gov/documents/2009/10/08/E9-24518/federal-leadership-in-environmental-energy-and-economic-performance>>, accessed on June 22, 2021.

² United States, Executive Office of the President [Donald Trump], Presidential Documents, *Executive Order 13834 – Efficient Federal Operations*, May 17, 2018, <<https://www.federalregister.gov/documents/2018/05/22/2018-11101/efficient-federal-operations>>, accessed on December 15, 2020.

³ Council on Environmental Quality, Office of Federal Sustainability, *Implementing Instructions for Executive Order 13834 Efficient Federal Operations*, April, 2019, <https://www.sustainability.gov/pdfs/eo13834_instructions.pdf>, accessed on December 10, 2020.

business units working together and with TVA's Sustainability Program to provide leadership and focus for TVA's efforts.

EO 13834 authorized the Council on Environmental Quality and the OMB to develop, issue, and update requirements and streamlined metrics to assess agency progress and performance in achieving EO goals. In response to the EO, the TVA FY 2020 SRIP reported on the following ten metrics:

1. Facility Energy Efficiency
2. Efficiency Measures, Investment, and Performance Contracting
3. Renewable Energy
4. Water Efficiency
5. High Performing Sustainable Buildings
6. Waste Management and Diversion
7. Fleet Management
8. Sustainable Acquisition/Procurement
9. Electronics Stewardship
10. Greenhouse Gas Emissions

Various SMEs from across TVA obtain data for calculating sustainability metrics from multiple sources, including TVA's Expense Reimbursement and Supply Chain management systems, and provide those calculations to E&EP personnel for inclusion in the SRIP.

On January 20, 2021, President Biden issued EO 13990⁴ partially revoking EO 13834, but the goals established in EO 13514 are still in effect. EO 13990 revoked all sections of EO 13834, except for sections 6,7, and 11 that outline the Duties of the Federal Chief Sustainability Officer, Duties of Heads of Agencies, and General Provision under the EO, respectively. As of the date this audit report, specific agency instructions for implementing these changes have not been issued.

⁴ United States, Executive Office of the President [Joe Biden], Presidential Documents, *Executive Order 13990 – Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, January 20, 2021, <<https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>>, accessed on July 13, 2021.

OMB's *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*⁵ direct OMB to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." In addition, agencies are directed to develop information resources management procedures for reviewing and substantiating (by documentation or other means selected by the agency) the quality (including the objectivity, utility, and integrity) of information before it is disseminated. TVA has developed Information Quality Guidelines based on OMB's guidance. TVA's guidelines state, "TVA strives to ensure the information it disseminates to the public is of the highest quality, objectivity, utility, and integrity." The guidelines also state, "information, of all types, disseminated to the public in any medium shall be reviewed to ensure it is accurate, clear, complete, reliable, and unbiased."

According to OMB, "the fact that the Internet enables agencies to communicate information quickly and easily to a wide audience not only offers great benefits to society, but also increases the potential harm that can result from the dissemination of information that does not meet basic information quality guidelines. It is crucial that information Federal agencies disseminate meets quality guidelines."

The Association of International Certified Professional Accountants and The Chartered Institute of Management Accountants state, "The building blocks of reliable, comparable and relevant environmental, social, and governance information begin with a foundation of quality reporting by company management." They also note, "Company reporting must be of high quality for investors and other stakeholders, who rely upon such data for their decisions."

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of the audit was to determine if information in TVA's SRIP has been validated prior to being disseminated to the public in accordance with any best practices. The scope included metrics contained in TVA's FY 2020 SRIP.

To achieve our audit objective, we:

- Reviewed EO 13834, *Efficient Federal Operations*, to gain an understanding of the legal and regulatory requirements associated with TVA's SRIP.
- Reviewed TVA's FY 2020, *Sustainability Report and Implementation Plan*, to gain an understanding of the information included in the report.

⁵ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; Notice; Regulation*, February 22, 2002, <<https://www.federalregister.gov/documents/2002/02/22/R2-59/guidelines-for-ensuring-and-maximizing-the-quality-objectivity-utility-and-integrity-of-information>>, accessed on May 10, 2021.

- Reviewed OMB, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, to gain an understanding of the government-wide guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information.
- Reviewed TVA's, *Information Quality Guidelines*, to gain an understanding of the organization's guidelines for ensuring information disseminated to the public is of the highest quality, objectivity, and integrity.
- Reviewed TVA Standard Program and Process 05.20, *Internal Environmental and Energy Sustainability Process*, to gain an understanding of TVA's processes for incorporating environmental sustainability and energy efficiencies into its operations.
- Interviewed TVA E&EP personnel and other TVA SMEs responsible for calculating metrics contained in the FY 2020 SRIP to gain an understanding of any procedures performed to validate data reported in TVA's SRIP.
- Reviewed TVA support for data used to calculate the metrics in TVA's FY 2020 SRIP.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

FINDINGS

We found TVA did not perform procedures to validate data used to calculate nine of the ten metrics reported in the FY 2020 SRIP. TVA validated data for the Greenhouse Gas Emissions information included in the report, but at most, performed reviews for reasonableness for the remaining nine metrics reported.

TVA E&EP personnel are responsible for calculating the following sustainability metrics:

- Facility Energy Efficiency
- Efficiency Measures, Investment, and Performance Contracting
- Renewable Energy
- Water Efficiency
- High Performing Sustainable Buildings
- Waste Management and Diversion
- Greenhouse Gas Emissions

The TVA E&EP group receives the calculated values from multiple SMEs within TVA for the following sustainability metrics:

- Fleet Management
- Sustainable Acquisition/Procurement
- Electronics Stewardship

TVA E&EP personnel provided *The Tennessee Valley Authority Inventory Management Plan for the Comprehensive Greenhouse Gas Reporting Plan FY2019*, which specifies methods and procedures used to verify and validate TVA's Comprehensive GHG Emission inventory. The plan includes detailed guidance for how the metric is calculated. In addition, it includes a data quality checklist for each input into the metric such as verifying the source of the data, validating the data prior to calculation, and checking that assumptions and criteria are documented. Each item is initialed as completed by the responsible party. We determined TVA follows the procedures outlined in *The Tennessee Valley Authority Inventory Management Plan for the Comprehensive Greenhouse Gas Reporting Plan FY 2019*.

For the remaining metrics calculated by E&EP, TVA provided support for calculation of the metrics, including raw data files, explanations of reasonableness checks performed, and trends reviewed to determine if the calculated metrics appear reasonable prior to their inclusion in the SRIP. However, no data validation procedures were performed prior to the information being disseminated to the public.

For two of the three metrics provided to E&EP by other SMEs and Fleet Management and Sustainable Acquisition/Procurement, TVA provided raw data files as support for the calculation of the metrics. However, for the Electronics Stewardship metric, TVA personnel were not able to provide any support to confirm the statement in the SRIP, "95% of newly purchased or leased equipment met energy efficiency requirements." TVA personnel did state, "TVA considers energy efficiency standards when evaluating purchases of new models of PCs [personal computers], monitors, and printers." We noted TVA's Maximo system captures purchases that meet energy efficiency standards, and therefore could be leveraged moving forward to support the claims in the SRIP for the Electronics Stewardship metric.

Lack of a process for validating data used to develop metrics can lead to inaccurate sustainability reporting causing reputational harm to TVA. This could also affect investors and other stakeholders, who rely upon such data for their decisions, according to The Association of International Certified Professional Accountants and The Chartered Institute of Management Accountants.

RECOMMENDATIONS

We recommend TVA's Vice President, Environment:

1. Develop guidance similar to that used to calculate the Greenhouse Gas Emissions metric to help ensure validity and consistency in the calculation of other metrics included in the SRIP.

TVA Management's Comments – TVA management agreed with the recommendation and stated, "E&EP will work with business units to develop guidance to set forth a reasonable data validation process for the SRIP metric areas." See the Appendix for TVA management's complete response.

2. Require SMEs to incorporate data validation steps into the review of raw data sources used to calculate metrics in the SRIP.

TVA Management's Comments – TVA management agreed with the recommendation and stated, "E&EP will work with business units to develop a checklist/form to document the data validation steps." See the Appendix for TVA management's complete response.

August 13, 2021

David P. Wheeler, WT 2C-K

RESPONSE COMMENTS- DRAFT AUDIT 2021-15783- FEDERAL SUSTAINABILITY REPORT
AND IMPLEMENTATION PLAN

Thank you for the opportunity to review and respond to the subject draft report. We appreciate the Office of the Inspector General's review and efforts to help TVA strengthen the Federal Sustainability Report and Implementation Plan (SRIP) and the associated federal metric submittal process. We also thank Chasity W. Scantling, Senior Auditor, and Rick Underwood, Director - Financial and Operational Audits, for their diligence and support to improve federal metric data.

Environment & Energy Policy (E&EP) has reviewed the report and agrees corrective actions will further improve data validation. Per the draft IG Report, it is important to note that the audit findings were not related to data quality in the FY2020 SRIP, but rather with the need to strengthen the data validation process/procedures beyond a review for reasonableness. Also, please note, the Biden Administration has indicated that they will be proposing new reporting requirements which are likely to change the reporting format and substance in the future. We understand the findings in the IG report and benefit of strengthening the data validation process. E&EP and the internal business units periodically perform data reviews and data checks, and will continue to work together to further strengthen data validation.

Please find below the recommendations and our proposed actions.

OIG Recommendations and Environment Responses

Recommendation 1: Develop guidance similar to that used to calculate the Greenhouse Gas (GHG) Emissions metric to help ensure consistency in the calculation of other metrics included in the SRIP.

Agree, with note. E&EP is the owner for the Greenhouse Gas Emissions metric. The review and validation of that data feeds processes in 7 of the 10 federal metrics in question. The sources for additional data reported in the SRIP are housed in other TVA business units. We agree with the recommendation and will work with business units to develop guidance to set forth a reasonable data validation process for the other metric areas. Due to increasing interest and reliance on the GHG emissions data, it is likely that particular processes for GHG data will include more robust reviews. For example, TVA is utilizing an independent consultant to review TVA's carbon (GHG) accounting processes.

Action: E&EP will work with business units to develop guidance to set forth a reasonable data validation process for the SRIP metric areas. Due Date: 7/15/2022

David P. Wheeler
Page 2
August 13, 2021


Recommendation 2: Require subject matter experts to incorporate data validation steps into the review of raw data sources used to calculate metrics in the SRIP.

We agree. Along with the guidance developed above, we will work with partner business units to develop a checklist/form to document the data validation steps.

Action: E&EP will work with business units to develop a checklist/form to document the data validation steps. Due date: 7/15/2022

In summary, we agree with the OIG's recommendations and have initiated corrective actions.

Accordingly, we submit this memorandum as our notice of acceptance of the recommendations and our initial corrective action plans. If you have further questions, please reach out to me or my team.



Rebecca C. Tolene
Vice President
Environment
WT 11C-K

RCT:TBP

cc: Robert M. Deacy, Sr., LP 5D-C
David B. Fountain, WT 6A-K
Tracy E. Hightower, LP 5B-C
Donald A. Moul, WT 7B-K
Ronald R. Sanders II, MR 5E-C
Michael D. Skaggs, WT 7B-K
Kay W. Whittenburg, MR 3A-C
OIG File No. 2021-15783
EDMS