## Fleet Modernization – Electric Vehicle Charging Stations Acquisition

OFFICE OF NSPECTOR GENERAL

AUDIT REPORT

Report Number 23-059-R24 | December 29, 2023



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## Highlights

#### Background

To manage its aging delivery fleet while supporting financial and environmental sustainability strategies from its ten-year plan, the U.S. Postal Service is investing \$9.6 billion, including \$3 billion in congressional funding, to electrify its delivery vehicles and procure electric vehicle supply equipment — more commonly known as charging stations. In preparation for charging station deployment, the Postal Service conducted first article testing (a process to validate that a prototype conforms with contract requirements) and monitored seven types of charging stations. Also, to ensure fleet readiness, the Postal Service is centrally storing and dispersing charging stations from its Material Distribution Center (MDC) in Kansas. It is crucial for the Postal Service to establish and maintain effective testing, monitoring, and oversight of its assets to support delivery operations, safeguard against theft, and foster business strategies.

#### What We Did

Our objective was to determine whether the Postal Service was effectively testing and monitoring the performance of, providing effective oversight over the contract for, and storage of, charging stations. We observed testing at Vienna, Virginia; conducted site observations and interviews at the MDC; and reviewed related policies and procedures.

#### What We Found

We found that the Postal Service conducted effective contract oversight by using the first article testing to verify that charging stations conformed to certain requirements identified in the contracts' statement of work. In addition, we found the Postal Service effectively conducted performance monitoring to evaluate the charging stations' short-term reliability. However, the Postal Service did not conduct long-term performance monitoring, test with Next Generation Delivery Vehicles, or test the lifespan of the charging stations. Therefore, we cannot opine on the overall reliability of the charging stations. Lastly, we found that management controls over the storage of charging stations were not effective. Specifically, facility management did not employ necessary physical safety measures designed to protect and deter the theft of assets, such as

the These issues occurred because facility management did not provide sufficient oversight or resolve security deficiencies in a timely manner, as they relate to asset management responsibilities, which contributed to



the loss of \$67,000 in assets. The Postal Service initiated corrective actions and developed plans to address safeguards MDC-wide; however, until all the safeguards are implemented, the assets related to charging stations stored at the MDC, with a value of approximately **Exercise**, are considered at risk of theft.

#### Recommendation

We recommended management take urgent action to finalize and implement the plan for physically safeguarding assets stored at the MDC, in accordance with Inspection Service recommendations and AS-701, Asset Management.



### **Transmittal Letter**

OFFICE OF INSPECTOR GENERAL UNITED STATES POSTAL SERVICE

December 29, 2023

MEMORANDUM FOR:

RONNIE J. JARRIEL SENIOR VICE PRESIDENT, FACILITIES AND FLEET MANAGEMENT

MARK A. GUILFOIL VICE PRESIDENT, SUPPLY MANAGEMENT

Amande 4. Staffol

FROM:

Amanda Stafford Deputy Assistant Inspector General for Retail, Marketing and Supply Management

SUBJECT:

Audit Report – Fleet Modernization – Electric Vehicle Charging Stations Acquisition (Report Number 23-059-R24)

This report presents the results of our audit of Fleet Modernization – Electric Vehicle Charging Stations Acquisition.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Shirian Holland, Director, Infrastructure and Supply Management, or me at 703-248-2100.

Attachment

cc: Postmaster General Corporate Audit Response Management

## Results

#### Introduction/Objective

This report presents the results of our self-initiated audit of Fleet Modernization – Electric Vehicle Charging Stations Acquisition (Project Number 23-059). Our objective was to determine whether the U.S. Postal Service is effectively testing and monitoring the performance of, providing effective oversight over the contract for, and storage of, electric vehicle supply equipment (EVSE) – more commonly known as charging stations. See Appendix A for additional information about this audit.

#### Background

To manage its aging fleet,<sup>1</sup> while supporting financial and environmental sustainability strategies from its Delivering for America 10-year plan,<sup>2</sup> the Postal Service is investing \$9.6 billion, including \$3 billion in congressional funding,<sup>3</sup> to electrify its delivery vehicles and procure electric vehicle charging stations. A charging station is a piece of equipment that supplies electrical power for charging batteries in electric vehicles. The charging stations will support internal power needs for the electric delivery vehicles scheduled to be deployed to Sorting and Delivery Centers - centers that will consolidate multiple delivery units and package sortation operations into one facility – and select delivery units. Currently, these charging stations will not be available for public use nor to support a workplace charging program.<sup>4</sup>

#### Acquisition

The Delivering for America plan discusses the fleet replacement strategy, including the Postal Service's plan to acquire 106,000 vehicles with deliveries expected through 2028. This plan consists of at least 66,000 battery electric delivery vehicles, including 45,000 purpose-built battery electric-powered Next Generation Delivery Vehicles and 21,000 battery electric-powered commercial-off-the-shelf (COTS) vehicles. In addition, the Postal Service plans for all Next Generation Delivery Vehicles (deliveries beginning in

#### The Delivering for America Plan

Discusses the fleet replacement strategy, including the Postal Service's plan to acquire **106,000 vehicles** with deliveries expected through 2028.



2026) and COTS vehicles (deliveries between 2026 and 2028) to be 100 percent electric, as the Postal Service explores the feasibility of achieving 100 percent electrification for the entire fleet. To prepare for the deployment of electric vehicles, in February 2023, Postal Service Headquarters Supply Management awarded contracts to three suppliers to provide COTS charging stations. The Postal Service placed an initial order of charging stations for approximately

at the end of February 2023, to be delivered through February 2026.

#### Testing

After being awarded the contract, each supplier submitted procedures to meet first article test (FAT) requirements and provided seven types of charging stations for installation and testing at three designated sites in Northern Virginia, one for each supplier (see Table 1). The purpose of a FAT is to validate the capability of a supplier's production process and ensure that the first article or prototype conforms with contract requirements at the initial stage of production. The approved first article then serves as the manufacturing baseline for production units.

<sup>1</sup> The Postal Service's delivery fleet of Long-Life Vehicles (LLVs) has a lifespan of 24 years. As of the end of fiscal year 2023, the Postal Service had approximately 130,000 right-hand-drive LLVs. All LLVs have exceeded their projected 24-year life span and account for over 52 percent of the Postal Service's vehicle fleet.

<sup>2</sup> The Postal Service's 10-year plan is officially named Delivering for America: Our Vision and Ten-Year Plan to Achieve Financial Sustainability and Service Excellence. The plan was developed to transform financial performance and customer service through significant investments in people, technology, and infrastructure.

<sup>3</sup> Inflation Reduction Act of 2022, Public Law No: 117-169, August 16, 2022.

<sup>4</sup> U.S. Government Accountability Office, Electric Vehicle Infrastructure: USPS Should Plan for Potential Workplace Charging, GAO-23-105781, April 13, 2023.

#### Table 1. Testing Schedule

Supplier	Number of Charging Station Types	FAT Date	Location
Supplier A	2	April 12, 2023	Manassas Main Post Office, VA
Supplier B	3	April 18, 2023	Leesburg Main Post Office, VA
Supplier C	2	April 20, 2023	Vienna Post Office, VA

Source: Next Generation Delivery Vehicle program management office.

A FAT is not normally required for commercially available products,<sup>5</sup> such as the charging stations acquired by the Postal Service, because the products have already been manufactured and the standardization of the conversion process from raw materials to finished products has already been established and tested. However, Postal Service officials saw this as an opportunity to evaluate the performance requirements of the first units delivered to the Postal Service and validate that each supplier's products met the requirements of the statement of work and contract.

Postal Service officials from the Next Generation Delivery Vehicle program management office, in conjunction with the Vehicle Center of Excellence and the Test, Evaluation & Quality teams,<sup>6</sup> were responsible for validating that the charging stations fully met the requirements of the contract. The tests included a series of physical feature confirmations, ergonomic and safety reviews, certifications and other related documentation reviews, execution of site configuration setup, vehicle charging capability reviews, and reporting capability (i.e., dashboard reporting of vehicle and energy management data) reviews. The vehicle charging capability reviews were conducted using three COTS vehicles. Next Generation Delivery Vehicles were not used during the charging station testing because they are not yet in production.

Upon testing completion, the contracting officer<sup>7</sup> provided a written notice to suppliers with one of the following results:

- Approval The Postal Service determined that the testing and evaluation of the equipment is found to be in conformance with contract requirements.
- Conditional Approval The Postal Service will state any further action required of the supplier to obtain a full approval. This may include any necessary changes, modifications, or repairs to the first article.
- Disapproval The Postal Service will cite reasons for the disapproval. The supplier, upon request of the Postal Service, must repeat any or all FATs. After each request for additional tests, the supplier must make any necessary changes, modifications, and repairs or select another first article for testing.

#### Performance Monitoring

After completing the initial testing, the Postal Service elected to monitor charging station performance at the three locations for a three-month period (May – July 2023) to evaluate its short-term reliability. This process also allowed the Postal Service to potentially identify any deficiencies or anomalies related to the charging station behaviors and functionality. The charging stations will undergo a final round of commissioning tests<sup>8</sup> to ensure proper functionality upon installation at Postal Service sites.

<sup>5</sup> Federal Acquisition Regulation, Subpart 9.302 and 9.303. The Federal Acquisition Regulation is the primary regulation governing federal executive agencies in their purchasing of goods and services with appropriated funds. While the Postal Service is not subject to the Federal Acquisition Regulation, the Postal Service stated that the use of a FAT is a standard practice when the Postal Service acquires complex, commercially-available equipment or programmatic acquisitions.

<sup>6</sup> The Next Generation Delivery Vehicle program management office manages the development of safer and more environmentally friendly vehicles as the Postal Service moves towards the electrification of its delivery fleet. The Vehicle Center of Excellence provides technical engineering expertise to both the electric vehicle and charging station acquisition efforts. The Test, Evaluation & Quality team manages testing, evaluation, analysis, and quality assurance in support of equipment and systems acquisition.

<sup>7</sup> The contracting officer plays an essential role in carrying out the solicitation, award, management, and termination of a contract.

<sup>8</sup> Commissioning tests encompass a series of verifications to determine proper installation, cellular connectivity configuration, and electrical output of the equipment.

#### Storage

In addition to administering and overseeing the charging station contracts, Supply Management also manages the receipt and storage of charging stations at the Material Distribution Center (MDC) in Topeka, Kansas — comprised of ten Postal Serviceowned or leased buildings. To prepare for the storage of the charging stations, at the end of January 2023, Postal Service Headquarters selected the MDC to be the centralized storage and provisioning source for the charging stations and their associated repair parts, which would be deployed to Postal Service facilities nationwide. MDC officials designated **Service** as the storage location for its charging stations.<sup>9</sup> MDC officials met with the U.S. Postal Inspection Service<sup>10</sup> in February 2023 to identify and discuss necessary facility and security improvements to **Service** which had been previously used for unmanned long-term storage.

Figure 1 summarizes key events of the Postal Service's charging station acquisition process.



Figure 1. Charging Stations Implementation Key Events

Source: OIG analysis based on the information provided by Next Generation Delivery Vehicle program management office.

#### Finding #1: Effective Charging Station Testing, Performance Monitoring, and Contract Oversight

We found that the Postal Service conducted effective contract oversight by using the FAT to verify that charging stations conformed to certain requirements identified in the contracts' statements of work.<sup>11</sup> In addition, we found the Postal Service effectively conducted performance monitoring to evaluate the charging stations' short-term reliability.

For example, the Postal Service verified the vehicle charging capability, which includes measuring electrical current output levels and power scheduling tests.<sup>12</sup> As a result of completing the testing, the Postal Service gave conditional acceptance to all <sup>66</sup>We found the Postal Service effectively conducted performance monitoring to evaluate the charging stations' short-term reliability.<sup>99</sup>

three suppliers, with the stipulation that the following issues identified during testing be resolved for full acceptance:<sup>13</sup>

 Supplier A: Several workmanship issues were noted during testing. Specifically, the cable retractors<sup>14</sup> needed to be replaced with a new

<sup>9</sup> The Postal Service has leased a portion of since June 2015, but has fully occupied as of January 1, 2023.

<sup>10</sup> The U.S. Postal Inspection Service is responsible for Postal Service policies, procedures, standards, and requirements for facility security and access controls. It has also established a risk management process – the Vulnerability Risk Assessment Tool – to ensure compliance with facility security policies and procedures and identify facility security deficiencies. Any deficiencies identified through the assessment must be addressed and resolved.

<sup>11</sup> A document that provides a description of a given project's requirements. It defines the scope of work being provided, project deliverables, timelines, work location, and payment terms and conditions.

<sup>12</sup> Power scheduling allows a user to activate charging levels and times in accordance with specific criteria, such as the ability to schedule off-peak hours to accommodate local power demand periods or provide load sharing across all charging stations at a site.

<sup>13</sup> Even though several issues were identified, the Postal Service gave conditional acceptance to the three suppliers at the time of testing, since the noted deficiencies were not considered significant.

<sup>14</sup> A cable management system that keeps the charging cable off the ground, minimizes trip hazards, keeps the cable clean, and helps to extend the life of the cable.

system that provides a heavier counterweight to properly retract the charging cable. Additionally, a stripped retaining screw needed to be replaced on at least one model. The new cable retractor and retaining screw were installed and reviewed, and Supplier A was given a full acceptance by the Postal Service on May 19, 2023.

- Supplier B: Several software related issues were noted during testing. Specifically, documentation to prove dynamic power sharing capabilities needed to be provided to the Postal Service. This documentation was provided by the supplier and approved by the Postal Service on May 4, 2023. In addition, a ground fault error when electricity takes an unplanned path preventing the electrical current from completing its proper circulation was detected as well as an outdated firmware. The supplier added circuit jumpers and updated the firmware to resolve the ground fault issue. Supplier B was given a full acceptance by the Postal Service on May 16, 2023.
- Supplier C: Several software and firmware related issues were noted during testing. Specifically, if a Radio Frequency Identification card – used to activate a charging session – needed to be removed from the system (i.e., the card is lost or stolen), it also removed the vehicle information from the system. In addition, Postal Service officials noted that the charging station continued to output a small charge even when it was set to not emit any power, which could limit the ability to reduce power during high demand periods. The supplier updated the software and firmware associated with its charging stations, and Supplier C was given a full acceptance by the Postal Service on June 28, 2023.

After the FAT, the Postal Service elected to monitor charging station performance at the three locations for a three-month period (May – July 2023). During the performance monitoring phase, the Postal Service assessed charging session attributes (such as charging time), energy dispensed, the overall condition of the charging station (i.e., cord, holster, and retractor), screen condition, and software connectivity. The charging stations performed as expected with one exception. One of the dual charging stations lost communication connectivity after a firmware update. The power to the station was manually cycled off and turned back on, and communications resumed normally. All other incidents were considered human error by users initiating the charging sessions, which management recognized will require timely user training to avoid, once electric vehicles are deployed.

Overall, the FAT testing and short-term performance monitoring performed by the Postal Service validated certain statement of work requirements. The Postal Service is currently developing longterm performance monitoring plans, which are not yet finalized. As such, we were unable to evaluate or conclude on the overall reliability of the charging stations.<sup>15</sup> Given the magnitude of the investment to deploy up to 41,500 charging stations to facilities throughout the delivery network, the choice to test and monitor their performance was prudent. Therefore, we will not be making any recommendations related to testing at this time.

## Finding #2: Ineffective Controls Over the Storage of Charging Stations

We found that management controls over the storage of charging stations, located at the MDC, were not effective. Specifically, facility management did not employ necessary physical safety measures designed to protect and deter the theft of Postal Service assets.

\*\*Facility management did not employ necessary physical safety measures designed to protect and deter the theft of Postal Service assets.\*\*

<sup>15</sup> The Postal Service stated that all models acquired have been in production and commercially used for some time, with predecessor products dating back more than a decade.

In March 2023, MDC officials discovered that Postal Service information technology assets were stolen from **March 10**<sup>16</sup> That same month, U.S. Postal Inspection Service officials began an investigation and conducted a risk assessment, using the Vulnerabilities Risk Assessment Tool. At the conclusion of the assessment, the Inspection Service recommended that the Postal Service implement

to bolster security. In March and April 2023, the Postal Service made other attempts to improve the security of **Control** including replacing locks and eight exterior doors, but was not able to implement all the Inspection Service's recommendations at the local level.<sup>17</sup>

Despite the theft, and without implementing crucial remediation measures identified in the Inspection Service assessment, the Postal Service began storing charging stations in **Service** when the first 2,000 units arrived in April 2023. In May 2023, **Service** was again burglarized, resulting in additional losses to the Postal Service, including the theft of charging station heads (see Figure 2) and other information technology assets, such as monitors, printers, and docking stations.

Following this second break-in, starting in June 2023, MDC management contracted with off-duty law enforcement to conduct daily patrols of the Postal Service-controlled areas to supplement the prior security control measures and once again replaced the locks in **Security** Figure 3 summarizes the events related to the safeguarding and thefts of the charging stations.

However, these measures still do not ensure is in compliance with Postal Service policy requiring physical safeguards or limiting unauthorized access to Postal Service assets. As of our site visit to the MDC in August 2023, the Postal Service

where high-value Postal Service assets were stored (see Figure 4).

Figure 2. Examples of Electric Vehicle Charging Station Heads



Source: OIG photograph taken at the Vienna, VA, Post Office on April 20, 2023.

<sup>16</sup> Postal Service officials at the MDC were aware of general security related issues occurring as recently as four years ago in the same industrial park, which resulted in the loss of thousands of dollars' worth of tools and equipment suffered by prior tenants.

<sup>17</sup> Postal Service officials stated that any project involving the implementation of with Headquarters Facilities.

would require coordination





Source: OIG analysis based on the information provided by MDC and U.S. Postal Inspection Service officials.



Source: OIG photograph taken at of the MDC on August 16, 2023.

Postal Service policy states that assets must be protected from loss, theft, damage, impairment, improper use, etc. and asset accountability and control are the responsibilities of all Postal Service personnel, to include facility installation heads,<sup>18</sup> vice presidents, and executive department heads.<sup>19</sup> Due to the current categorization of **Service** policy<sup>20</sup> conditionally<sup>21</sup> requires (dependent on the results of an Inspection Service risk assessment) the following controls to be implemented:

- Access Control Systems
- Criminal Investigative Office
- Intrusion Detection System
- Security & Enterprise Physical Access Controls Closed-Circuit-Television System

The installation head or designee must remediate deficiencies identified within 30 working days and record as complete in the Vulnerabilities Risk Assessment Tool.<sup>22</sup>

These issues occurred because facility management did not provide sufficient oversight nor resolve security deficiencies in a timely manner, as it relates to asset management responsibilities. Specifically, the required security upgrades necessitated coordination with Headquarters Facilities and was not able to be implemented at the local level. In addition, despite several security-related incidents, MDC officials did not view as an at-risk, administrative facility that necessitated urgent mitigating actions. For example, prior to the thefts, Inspection Service officials instructed MDC

18 A facility installation head is one who plans, organizes, directs, guides, controls, and evaluates the efforts of subordinate managers, employees, or both to achieve organizational goals.

- 19 Handbook AS-701, Asset Management, Section 5-1.1.
- 20 Handbook AS-503, *Standard Design Criteria*, Appendix M1-F. 21

<sup>22</sup> Handbook RE-5, Building and Site Security Requirements, Section 2.1.3.1.

management to secure interior doors between each section of the building at night. However, MDC management stated they evaluated this recommendation and determined it was not operationally feasible.<sup>23</sup>

While additional safeguards will not provide absolute assurance to prevent break-ins or thefts, completing required security measures in a timely manner is important to deter loss of Postal Service assets. As a result of insufficient safeguards at the Postal Service incurred two thefts and losses of approximately \$59,700 in information technology assets (e.g., computer monitors, printers, and docking stations) and \$7,700 from two charging station heads. Thus, we estimated that the Postal Service incurred supported questioned costs<sup>24</sup> of \$67,400 for the stolen assets.

\*\* Postal Service incurred two thefts and losses of approximately \$59,700 in information technology assets and \$7,700 from two charging station heads.\*\*

Postal Service officials began developing a plan to address necessary safeguards at in February 2023. The plan includes

for multiple Postal Service-controlled buildings to ensure the facilities comply with Postal Service policy. However, specific security upgrade plans for (architectural drawings, implementation timelines, etc.) have not been finalized. Until all the necessary safeguards are implemented by the Postal Service, all assets stored in (with a value of approximately) as of June 2023, are considered at risk due to inadequate physical safety and security controls.<sup>25</sup>

#### Recommendation

We recommend Vice President, Supply Management, in coordination with Vice President, Facilities, take urgent action to finalize and implement the physical safeguard plan for assets stored in the Material Distribution Center, in accordance with Inspection Service recommendations and AS-701, Asset Management.

#### **Looking Forward**

The deployment of charging stations and monitoring their performance presents the Postal Service with a significant operational challenge. While the choice to conduct FAT and short-term performance monitoring of its charging stations was prudent, the operational compatibility with Next Generation Delivery Vehicles and lifespan of the charging stations is uncertain at this point. Specifically, the Postal Service did not:

- Conduct charging compatibility tests on Next Generation Delivery Vehicles – which predominantly will make up the Postal Service's electric vehicle fleet – due to non-availability. Instead, the Postal Service used three COTS electric vehicles in conducting the charging station FAT. The Postal Service stated that it's engaging with the Next Generation Delivery Vehicle manufacturer and charging station suppliers to develop interoperability testing between the charging stations and the purposebuilt vehicles.
- Test for, nor verify, the ten-year service life of the charging stations. Officials from the Next Generation Delivery Vehicles program management office stated that the ten-year service life requirement was not tested as they did not see a need nor identify a practical way to do so. In addition, this is an aspirational goal for how long the charging stations are believed to last. Due to the nascent nature of the technology, our research did not indicate any consistent

23 Postal Service officials stated that the doors between sections are designed for when the building is leased by multiple tenants to provide separation and prevent access between two tenants. They are not used when a tenant has the entire facility because it is operationally inefficient. Full building access is needed when inventory is being continuously transported throughout the entire building.

<sup>24</sup> A cost that the OIG believes is unnecessary, unreasonable, or an alleged violation of law, regulation, or contract.

<sup>25</sup> Physical operations assets (for example, computer equipment or vehicles) that are unsafe or at risk of loss because of inadequate physical protection or safety practices.

or standardized long-term testing practices to validate the service life of the charging stations; however, we found that a ten-year service life is standard in the industry.

Exploring these opportunities could yield helpful insights as the Postal Service develops its long-term performance monitoring plans. Accordingly, due to inherent testing limitations, the OIG cannot opine on the overall reliability of the charging stations.

\*\* The ongoing testing, monitoring, and safeguarding of the charging stations are critical to mitigating financial and operational risks, as well as ensuring the Postal Service is obtaining the best value.\*\*

As the Postal Service continues to deliver on the vision to electrify its delivery vehicle fleet, the ongoing testing, monitoring, and safeguarding of the charging stations are critical to mitigating financial and operational risks, as well as ensuring the Postal Service is obtaining the best value. The OIG will continue to focus on areas of strategic risk for the Postal Service related to the acquisition and deployment of vehicles and the associated charging infrastructure.

#### **Management's Comments**

Management agreed with the recommendation and monetary impact in the report. While management did not agree or disagree with the findings, their comments provided additional clarity.

Regarding finding 1, management clarified that one of the selected suppliers has over 300,000 ports deployed worldwide with commercial units in use for 14 years; another has over 73,000 ports deployed and units in use for 13 years; and the final supplier has over 110,000 ports deployed and in use over 12 years. Accordingly, management views that there is an ability to draw conclusions about the overall reliability of the equipment. Regarding finding 2, management clarified they employed all available physical safety measures that were operationally available for the leased building. In addition, measures to mitigate security risk to the facility have been taken and will be maintained until permanent facility construction upgrades are completed.

Regarding the recommendation, management stated they will take action to finalize and implement the physical safeguard plan for assets stored in

of the MDC, in accordance with Inspection Service recommendations and Handbook AS-701, *Asset Management*. The target implementation date is September 30, 2024.

Regarding the monetary impact, management stated that the value includes information technology equipment that was stored within **state of**, but not related to the EVSE acquisition program. The value of the stolen EVSE equipment was \$7,684, or 11 percent of the inventory loss.

See Appendix B for management's comments in their entirety.

#### **Evaluation of Management's Comments**

The OIG considers management's comments responsive to the recommendation in the report, and the corrective action should resolve the issues identified.

All recommendations require OIG concurrence before closure. The OIG requests written confirmation when corrective actions are completed. The recommendation should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed.

## Appendices

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## Appendix A: Additional Information

#### Scope and Methodology

Our scope included the Postal Service's processes associated with charging station testing, performance, contract oversight, and storage. To perform this audit, we:

- Reviewed Postal Service's policies, procedures, and charging station contracts and identified requirements, including the specifications and performance of the goods received, and compliance with Postal Service Supplying Principals and Practices.
- Interviewed Postal Service officials from the Next Generation Delivery Vehicle program management office, Headquarters Supply Management, and the Vehicle Center of Excellence to gain an understanding of the roles and responsibilities, processes, and oversight related to the testing and performance of its charging stations.
- Conducted a site visit at the Vienna, VA, Post Office to observe charging station FAT, and gained a better understanding of the testing methodologies and criteria used to perform the FAT and measure success.
- Reviewed FAT results and performance data for the three suppliers and compared it for conformance to the statement of work.
- Conducted a site visit at the MDC to interview personnel and gained an understanding of internal controls related to the safeguarding of charging stations.
- Conducted best practice research against three federal agencies and two foreign postal operators related to testing, performance, and lifespan of the charging stations.

We conducted this performance audit from January 2023 through December 2023 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on December 1, 2023, and included their comments where appropriate.

In planning and conducting the audit, we obtained an understanding of Supply Management's internal control structure to help determine the nature, timing, and extent of our audit procedures. We reviewed the management controls for overseeing the program and mitigating associated risks. Additionally, we assessed the internal control components and underlying principles, and we determined that the following five components were significant to our audit objective: control environment, risk assessment, control activities, information and communication, and monitoring.

We developed audit work to ensure that we assessed these controls. Based on the work performed, we identified internal control deficiencies that were significant within the context of our objectives. Our recommendation, if implemented, should correct the weaknesses we identified.

We assessed the reliability of charging station performance data by interviewing Postal Service personnel knowledgeable about the data and conducting logical tests on the data for completeness and accuracy. We determined that the data were sufficiently reliable for the purposes of this report.

#### **Prior Audit Coverage**

The OIG did not identify any prior audits or reviews related to the objective of this audit within the last five years.

## Appendix B: Management's Comments



December 20, 2023

JOHN CIHOTA DIRECTOR, Audit Services

SUBJECT: Management Response to Draft Audit Report – Fleet Modernization – Electric Vehicle Charging Stations Acquisition (Project Number 23-059-DRAFT)

Thank you for the opportunity to provide comments to the Office of Inspector General's (OIG's) draft audit report titled, "Fleet Modernization – Electric Vehicle Charging Stations Acquisition" (Project Number 23-059-DRAFT), dated December 5, 2023. Management has reviewed the report along with its findings and recommendations. Management views that clarifications and additional information are required for areas of the report. Management agrees with the report's recommendation and monetary impact provided.

#### Finding #1: Effective Charging Station Testing, Performance Monitoring, and Contract Oversight

Management notes that the OIG found that the Postal Service conducted effective contract oversight by utilizing First Article Test (FAT) requirements within awarded contracts to verify that the charging stations conformed to specific requirements identified in the instrument's Statement of Work (SOW). Further, the OIG found that the Postal Service effectively conducted performance monitoring to evaluate the charging stations' short-term reliability.

Regarding the Electric Vehicle Support Equipment (EVSE) testing section, management purposely contracted for EVSE products that were commercially available and deployed widely within the marketplace. As clarification, the FAT was not used by Postal officials to better understand software functionality or workmanship of these products, but was used to validate that each supplier's products met the requirements of the SOW and contract.

Within the finding's last section, the OIG notes that it was unable to evaluate or provide a conclusion as to the overall reliability of the charging stations. In addition to footnote 17, management provided information during discussions with the OIG that one of the selected suppliers has over 300,000 ports deployed worldwide with commercial units in use for 14 years; another has over 73,000 ports deployed and units in use for 13 years; and the final supplier having over 110,000 ports deployed and in use over 12 years. Accordingly, management views that there is an ability to draw conclusions about the overall reliability of the equipment.

#### Finding #2: Ineffective Controls Over the Storage of Charging Stations

The OIG found that management controls over the storage of charging stations located at the Material Distribution Center (MDC) were not effective. Specifically, facility management did not employ necessary physical safety measures designed to protect and deter the theft of Postal Service assets.

Management employed all available physical safety measures that were operationally available for the leased building. Closing of interior doors as suggested by the OIG is not feasible as full

475 L'ENFANT PLAZA SW WASHINGTON, DC 20260-6201 WWW.USPS.COM building access is needed when inventory is being continuously transported throughout the entire building.

Management notes that additional measures to mitigate security risk to the facility have been taken and will be maintained until permanent facility construction upgrades are completed. Armed, on-site security personnel are in place and patrol during off hours and weekends, providing immediate on-site response as needed to any alerts or intrusions. These security personnel will remain in-place through the completion of building security improvements. This information was shared with the OIG during discussions, but is not reflected in the draft report.

#### Monetary Impact

Management agrees with the monetary impact. As clarification, the stated value includes information technology equipment which was stored within but not related to the EVSE acquisition program. The value of EVSE equipment stolen was \$7,684, or 11% of the inventory loss.

#### **OIG Recommendation**

Recommendation: We recommend [the] Vice President, Supply Management, in coordination with [the] Vice President, Facilities, take urgent action to finalize and implement the physical safeguard plan for assets stored in of the Material Distribution Center, in accordance with Inspection Service recommendations and AS-701, Asset Management.

#### Management Response Recommendation:

Management agrees with this recommendation and will take action to finalize and implement the physical safeguard plan for assets stored in of the Material Distribution Center (MDC), in accordance with Inspection Service recommendations and Handbook AS-701, Asset Management.

Responsible officials: Executive Manager, Asset Management Operations, and Vice President, Facilities

Target Implementation Date: September 30, 2024

E-SIGNED by MARK A GUILFOIL on 2023-12-21 12:22:14 EST

E-SIGNED by RONNIE J JARRIEL on 2023-12-21 10:57:22 EST

Mark A. Guilfoil Vice President, Supply Management

E-SIGNED by BENJAMIN.P KUO on 2023-12-21 11:24:37 EST

Benjamin Kuo Vice President, Facilities

**Ronnie Jarriel** Senior Vice President, Facilities & Fleet Management

cc: Manager, Corporate Audit Response Management

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