



Memorandum from the Office of the Inspector General

July 26, 2023

Laura J. Campbell
Jacinda B. Woodward

**REQUEST FOR MANAGEMENT DECISION – EVALUATION 2022-17400 – GAS PLANT
CRITICAL SPARE PARTS**

Attached is the subject final report for your review and management decision. You are responsible for determining the necessary actions to take in response to our findings. Please advise us of your management decision within 60 days from the date of this report. 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 evaluations 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 Heather R. Kulisek, Manager, Evaluations, at (423) 785-4815 or Lindsay J. Denny, Director, Evaluations, at (865) 633-7349. We appreciate the courtesy and cooperation received from your staff during the evaluation.

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

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Attachment

cc (Attachment):

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OIG File No. 2022-17400



Office of the Inspector General

Evaluation Report

To the Vice President,
Supply Chain and the
Senior Vice President,
Power Operations

GAS PLANT CRITICAL SPARE PARTS

Evaluation Team
Meghan H. Petty
Heather R. Kulisek

Evaluation 2022-17400
July 26, 2023

ABBREVIATIONS

CC	Combined Cycle Combustion Turbine
CC1	Critical Component Level 1
CC2	Critical Component Level 2
CT	Simple Cycle Combustion Turbine
EPRI	Electric Power Research Institute
LTSA	Long-Term Service Agreement
OIG	Office of the Inspector General
PO	Power Operations
SC	Supply Chain
SPP	Standard Programs and Processes
TVA	Tennessee Valley Authority

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MEMORANDUM DATED JULY 14, 2023, FROM LAURA J. CAMPBELL AND JACINDA B. WOODWARD TO DAVID P. WHEELER



Evaluation 2022-17400 – Gas Plant Critical Spare Parts

EXECUTIVE SUMMARY

Why the OIG Did This Evaluation

The Tennessee Valley Authority (TVA) operates 18 natural gas plants with a combined generation capacity of 11,777 megawatts. According to TVA's Integrated Resource Plan, natural gas will play an important role in TVA's future generation portfolio to ensure reliability and grid stability with projected significant solar expansion over the next decade. In addition, as TVA retires its coal-fired fleet, it will evaluate adding gas plants as a strategy to maintain reliability.

TVA defines critical spares as components or parts needed to (1) prevent loss of generation or transmission, (2) prevent unsafe operating conditions, and/or (3) return critical components to service. TVA identified 45,934 critical components for the 18 plants. Due to the importance of critical spare parts being available to reduce safety and generation impacts when equipment fails, we conducted an evaluation to determine if TVA adequately identified, stocked, and maintained critical spare parts for gas plants.

What the OIG Found

We found most gas plant critical components have not been evaluated to identify critical spare parts. In January 2023, TVA's dashboard for tracking progress towards identifying critical spare parts indicated only 291 of 45,934 critical componentsⁱ in the gas fleet had been reviewed. We identified the following contributing factors: (1) limited resources dedicated to reviewing existing components to identify critical spare parts (2) Power Operations not having governing procedures defining the process for identifying critical spare parts, and (3) incomplete inventory data in Maximo.ⁱⁱ We also found not all identified critical spare parts were in stock or set to reorder once used.

Additionally, we found (1) some improvements were needed to properly store and maintain critical spare parts, and (2) improvements are needed to maintain the useful life of certain items such as those with electronic components or requiring preventive maintenance while in storage.

ⁱ Critical Component Level 1 and Critical Component Level 2 were considered critical because failure of the component would result in loss of generation.

ⁱⁱ Maximo is the TVA system of record for inventory, asset, and location information.



Evaluation 2022-17400 – Gas Plant Critical Spare Parts

EXECUTIVE SUMMARY

What the OIG Recommends

We recommended the Senior Vice President, Power Operations and the Vice President, Supply Chain take action to identify which gas plant components need critical spare parts and ensure they are properly stocked, and maintained.

TVA Management's Comments

In response to our draft report, TVA management provided ongoing or planned actions to address seven of the eight recommendations and additional context around forced outage impacts from a lack of critical spare parts. See the Appendix for management's complete response.

Auditor's Response

We agree with TVA management's ongoing and planned actions in response to our recommendations.

BACKGROUND

The Tennessee Valley Authority (TVA) operates 18 natural gas plants: 8 combined cycle combustion turbines (CC) and 10 simple cycle combustion turbines (CT). The gas plants have a combined generation capacity of 11,777 megawatts. According to TVA's Integrated Resource Plan, natural gas will play an important role in TVA's future generation portfolio to ensure reliability and grid stability with projected significant solar expansion over the next decade. In addition, as TVA retires its coal-fired fleet, TVA will evaluate adding gas plants as a strategy to maintain reliability.

According to TVA Standard Programs and Processes (SPP) 04.021, *TVA Inventory Management Process*, TVA's goal is to carry critical spare parts in inventory to support current operating assets. Critical spares are components or parts needed to (1) prevent loss of generation or transmission, (2) prevent unsafe operating conditions, and/or (3) return critical components to service. Component criticality is determined in accordance with the applicable business unit procedures and/or processes.

TVA's *Guidance Document for Component Criticality Determination* specifies components should be classified by determining the impact of component failure, assuming all other components performed as designed. The impacts of failure for the two most critical classifications are as follows:

- Critical Component Level 1 (CC1) results in (1) a unit trip, (2) inability to startup, or (3) inability to safely shutdown in the event of a station blackout.
- Critical Component Level 2 (CC2) results in (1) a power reduction below normal full load (derate) or (2) inability to attain normal full load.

If a component does not meet the above criteria, or that of a lesser component criticality designation, it is considered to be noncritical or run-to-failure. TVA identified 45,934 components classified as CC1 or CC2 for the 18 plants.

TVA's *2023 Benchmarking Report* indicated its gas fleet average performance from 2019 through 2021 was third quartile in CC equivalent availability factor,¹ fourth quartile in CC equivalent forced outage rate,² and first quartile in CT starting reliability.³ In TVA's *Fiscal Year 2022 Enterprise Risk Portfolio*, Power Operations (PO) identified the risk of failure to maintain asset material condition as a medium probability and high-impact risk, one driver of which was long lead times for spare parts.

¹ CC Equivalent Availability Factor reflects the percentage of time over a given period that a generating unit was available to generate electricity for TVA-operated CC generating assets.

² CC Equivalent Forced Outage Rate reflects the percentage of hours within the defined period that the asset was not available to operate due to an unplanned event (forced outage or derate).

³ CT Starting Reliability reflects the percentage of successful attempts to start up a unit for generation, performance testing, or black start.

Due to the importance of critical spare parts being available to reduce safety and generation impacts when equipment fails, we initiated an evaluation of gas plant critical spare parts.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of our evaluation was to determine if TVA adequately identified, stocked, and maintained critical spare parts for gas plants. The scope of the evaluation was TVA gas plants for the time frames specified below. To achieve our objective we:

- Obtained and reviewed the following procedures to gain an understanding of TVA's inventory management and handling processes:
 - PO-SPP-09.080, *Critical Spares Program*
 - Supply Chain (SC) SPP-04.022, *Material Receipt, Inspection, Storage and Handling, Issue, Control and Return*
 - TVA-SPP-04.021, *TVA Inventory Management Process*
- Reviewed the following guide to identify best practices in critical spare parts management:
 - *Critical Spares: Program Implementation and Lessons Learned (3002010685)*, Electric Power Research Institute (EPRI),⁴ November 2017.
- Conducted interviews with SC and PO personnel to gain an understanding of the related processes.
- Reviewed reports issued by TVA's Operational Assurance group to identify related findings, recommendations, and management actions.
- Obtained and reviewed data on critical components and spare parts from TVA's asset and inventory management system⁵ as of November 16, 2022, to determine the population of critical components and spare parts in the gas fleet. We focused our analysis on the two highest criticality ratings (CC1 and CC2) as defined in TVA's *Guidance Document for Component Criticality Determination* because failures in those components would directly and imminently result in loss of generation.
- Judgmentally selected 6 of the 19 main gas plant storerooms to review available inventory and observe maintenance practices. We selected the Brownsville Distribution Center and the 5 plant storerooms with the highest number of unique inventory catalog items designated as critical spare parts: Allen CC, Brownsville CT, Johnsonville CT, Magnolia CC, and Paradise CC. We compared the quantity listed in Maximo to the quantities on hand for

⁴ The EPRI is an independent, nonprofit energy research and development organization with a mission to advance safe, reliable, affordable, and clean energy for society through global collaboration, science and technology innovation, and applied research. It conducts research and development relating to the generation, delivery, and use of electricity for the benefit of the public.

⁵ Maximo is the TVA system of record for inventory, asset, and location information.

accuracy at the 6 storerooms we visited from December 5, 2022, through December 13, 2022.

- Obtained and reviewed data on gas plant forced outages from January 1, 2020, through December 31, 2022, to identify potential impacts to generation from unavailable critical spare parts. For outages identified by gas plant personnel where critical spare parts were unavailable, we also obtained and reviewed power replacement costs provided by TVA to identify potential monetary impacts from lost generation availability.

This evaluation was conducted in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation*.

FINDINGS

We found most critical components at TVA's 18 gas plants have not been evaluated to identify critical spare parts. In January 2023, TVA's dashboard for tracking progress toward identifying critical spare parts indicated only 291 of 45,934 critical components⁶ in the gas fleet had been reviewed. We also found not all identified critical spare parts were in stock or set to reorder once used.

We found some improvements were needed to properly store and maintain critical spare parts. We noted improvements are needed to maintain the useful life of certain items such as those with electronic components or requiring preventive maintenance while in storage.

MOST CRITICAL COMPONENTS HAVE NOT BEEN REVIEWED TO IDENTIFY CRITICAL SPARE PARTS

According to the EPRI, once critical equipment has been identified, spare and replacement items critical to supporting the operations and maintenance of the critical equipment must be identified. TVA created a dashboard to track progress towards identifying critical spare parts in 2019. In January 2023, the dashboard indicated 291 of 45,934 critical components in the gas fleet had been reviewed to identify critical spare parts needed. We identified the following contributing factors for the lack of identified critical spare parts: (1) limited resources dedicated to reviewing existing components to identify critical spare parts, (2) PO not having governing procedures defining the process for identifying critical spare parts, and (3) incomplete inventory data in Maximo. Clear identification of critical spare parts is necessary to enable plant staff to apply requirements such as reordering and stocking policies.

⁶ CC1 and CC2 assets were considered critical because failure of the component would result in loss of generation.

Resources to Identify Critical Spare Parts for Existing Components Are Insufficient

In February 2022, TVA management canceled the PO process for critical spare parts, PO-SPP-09.080 *Critical Spares Program*. TVA management indicated “PO has not had the resources needed to execute the program requirements.” In addition, TVA-SPP-04.021, *TVA Inventory Management Process*, states business unit engineering groups are responsible for identifying critical spare parts and providing the appropriate information to identify these items as critical in Maximo. However, according to PO engineering personnel, there is no systematic effort to review existing components for needed spares and additional resources would be required to identify critical spare parts for all gas plant critical components.

No Formal Process for Critical Spare Parts

PO does not have an SPP detailing a governing process for managing critical spare parts. In 2013, an Office of the Inspector General (OIG) evaluation⁷ found Coal and Gas Operations⁸ did not have an SPP to govern its critical spare parts program and recommended development of an SPP. In 2016, PO implemented PO-SPP-09.080, *Critical Spares Program*, to describe the process of identifying critical plant components requiring spares, determine the correct number of spares to maintain in stock, and define the process for requesting authorization for the procurement of the correct number of spares. However, in 2019, PO-SPP-09.080 was placed on administrative hold, and in February 2022, TVA management canceled it. As of February 2023, PO was developing a new gas plant spare parts process.

Incomplete Inventory Data in Maximo

According to PO personnel, not every item in Maximo is associated with an asset. Therefore, when reviewing critical spare parts in Maximo, it can be unclear for which critical asset the critical spare part is needed. If the critical spare part has not been tied to the critical asset, the part number may have to be located on a drawing or another location at the plant to search for the item in Maximo, which increases the chance a purchased critical spare part might not be identified.

In addition, TVA’s 8 CCs have vendors under long-term service agreements⁹ (LTSA), which includes providing critical spare parts for the combustor, turbine, compressor, and a portion of the inlet and exhaust. According to the LTSA program manager, TVA maintains the inventory of these critical spare parts and includes this information in Maximo for one vendor, but does not for the other two vendors, because contract terms do not allow TVA access to inventory information. Maximo includes a field to identify inventory items covered by

⁷ Evaluation 2012-14587, *Review of TVA’s Nuclear Power Group and Coal and Gas Operations Critical Spare Parts Programs*, October 17, 2013.

⁸ In 2013, TVA’s gas plants were managed under the Coal and Gas Operations group. The group was later reorganized as PO.

⁹ LTSAs provide for certain maintenance services and parts for covered components and equipment to include periodic inspection and testing, repair or placement of certain parts, and provision of certain replacement consumables and parts.

LTSAs. We identified 9 critical spare parts covered by a LTSA, but the items were not identified as covered by an LTSA in the appropriate field in Maximo. Maximo also showed there was zero inventory for each of the 9 items. Without indicating the critical spare parts were related to an LTSA, there is an increased risk that the part could be ordered outside the terms of the LTSA. SC indicated the field to identify LTSAs was added to Maximo during fiscal year 2022 and they were continuing efforts to populate that field as of November 2022. In January 2023, SC indicated they were working to establish an LTSA storeroom rather than populating the checkbox. No target date for completing those efforts had been established at that time.

NOT ALL CRITICAL SPARE PARTS WERE STOCKED OR SET TO REORDER

While TVA's goal is to carry critical spare parts in inventory to support current operating assets, we determined TVA's stock and reorder practices do not ensure availability of all identified critical spare parts. Of the 334 items designated as critical spare parts for the 6 locations we reviewed, 32 items (approximately 10 percent) were not available in the storeroom listed. For the 32 unavailable critical spare parts, SC indicated funding was requested to stock 18 items, 9 items were held in inventory at other storerooms, 4 items were in the process to be restocked, and 1 item was revised to noncritical.¹⁰ Lead times for replacement ranged from 45 to 365 days.

We also found 7 items at the 6 locations we visited, that were currently stocked, but were not set to reorder once used. SC reviewed the 7 items and indicated 1 was changed to reorder, 1 had reorder settings at other sites, and 5 had no reorder rules established because SC had not been contacted to do so. In addition, we reviewed all critical spare parts identified in Maximo and found approximately 50 percent¹¹ were not set to reorder.

Not having critical spare parts on hand in the event they are needed may extend the time units are unavailable for generation after equipment failure. According to SC personnel, since August 2021, SC and PO have partnered on a continuous improvement initiative to assess critical spare part inventory, including a shared inventory approach.

¹⁰ The item was identified in 2020 as a critical spare part by Plant Integration. In January 2023, Regional Engineering indicated the item was not considered to be a critical spare part. Plant Integration agreed and the designation was removed by SC.

¹¹ Critical spare parts that were designated as repairable were excluded because they would not require reorder.

STORAGE AND MAINTENANCE PRACTICES COULD BE IMPROVED FOR CRITICAL SPARE PARTS

We found some improvements were needed to properly store and maintain critical spare parts. According to SC-SPP-04.022, *Material Receipt, Inspection, Storage and Handling, Issue, Control and Return*, SC shall ensure the protection and care of items during storage so as to minimize the possibility of corrosion, contamination, deterioration, or physical damage. In addition, SC-SPP-04.022 states that Level A items shall be stored under special conditions with requirements governing the temperature and humidity levels, ventilation systems, and any other specific storage requirements. Maximo indicates the storage level requirements for each item. We identified 8 critical spare parts that were not stored properly. These 8 items were identified as requiring Level A storage and were stored in heated, but not cooled, warehouses. In response to our observations, SC indicated 7 of the 8 items could be reclassified to require heated, but not cooled, environments, and the remaining item (valued at \$476) should be moved to Level A storage.

Improvements were also needed to ensure electronic components are properly stored. Electronic items may be susceptible to damage in excessively hot or humid environments. We identified 18 items with electronic components that had storage requirements for heated, but not cooled or humidity controlled, warehouses. The items were valued at \$96,406, and lead times for replacement ranged from 45 to 365 days. As of March 2023, PO requested SC move the electronic items we identified into climate-controlled storage.

PO personnel informed us of certain critical spare parts that should require in-storage maintenance, such as transformers, rotors, and motors; however, they indicated preventive maintenance is not always included in Maximo for critical spare parts. For example, PO personnel indicated there is not preventive maintenance in Maximo for critical spare parts at the Brownsville Distribution Center. PO personnel also provided instances of unusable critical spare parts that were not maintained while in inventory, resulting in costly refurbishments prior to use.

Proper storage and preventive maintenance are vital to maintain critical spare parts to ensure they are in working condition when needed.

RECOMMENDATIONS

We recommend the Senior Vice President, PO, in collaboration with the Vice President, SC:

- Evaluate critical components to identify critical spare part needs.

TVA Management's Comments – TVA management stated they are currently executing data clean-up and will develop guidance for identification of needed spares and associated stocking levels. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's ongoing and planned actions.

- Establish a governing SPP for PO critical spare parts.

TVA Management's Comments – TVA management indicated this gap was identified prior to the evaluation, and the draft procedure for PO critical spare parts was provided during the audit; however, it was not acknowledged in the recommendations or findings. See the Appendix for TVA management's complete response.

Auditor's Response – We disagree our report did not acknowledge TVA was drafting a new procedure. Our finding on Page 4 states TVA was developing a new gas plant spare parts process as of February 2023. Additionally, although management stated they had identified the gap prior to the evaluation, according to TVA personnel, they did not begin working on a new procedure until January 2023, (3 months after we started this evaluation). Also, the most current draft of a new procedure that was provided to us during our review was noted as being "far from finished".

- Associate inventory items to the components where they are used.

TVA Management's Comments – TVA management stated they are addressing this opportunity through efforts to clean up the data and associate spare parts to the assets. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's ongoing action.

- Review all critical spare parts to verify they are in stock and request to stock as necessary.

TVA Management's Comments – TVA management stated PO and SC have partnered to assess stocking levels for gas spare parts including critical spares as a shared inventory approach. The groups will continue to engage with one another to ensure adequate availability and/or return to service of our generating assets that also achieves lower costs for the customers. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's ongoing action.

- Evaluate reorder points for critical spare parts to ensure continued availability of currently stocked items.

TVA Management's Comments – TVA management stated PO and SC have partnered to assess stocking levels for gas spare parts including critical spares as a shared inventory approach. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's ongoing action.

- Develop a process to ensure preventive maintenance is performed on critical spare parts while in storage.

TVA Management's Comments – TVA management stated PO and SC will review process improvements for identifying materials that need preventive maintenance while in storage. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's planned action.

We recommend the Vice President, SC, in collaboration with the Senior Vice President, PO:

- Establish a process to ensure LTSA covered critical spare parts are adequately identified in Maximo.

TVA Management's Comments – TVA management stated SC is working on an improved process for identification of LTSA critical spare parts within Maximo. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's ongoing action.

- Verify storage levels for critical spare parts, including those with electronic components, to ensure proper storage is provided.

TVA Management's Comments – TVA management stated PO and SC will look for process improvements needed for items that require certain storage requirements and adjust as necessary. See the Appendix for TVA management's complete response.

Auditor's Response – We agree with TVA's planned action.

Additionally, TVA management provided a conclusion regarding impacts to reliability from a lack of critical spare parts. TVA management indicated forced outage data for the past 2 years showed spare parts not on hand contributed to 19 percent of PO gas fleet forced outage extension days.

Auditor's Response - As referenced above, PO's internal dashboard indicates that less than 1 percent of critical components in the gas fleet has been reviewed to identify critical spare parts needed, and not all items identified as needing critical spares were in stock. With a small percentage of critical assets reviewed, and not all critical spares in stock, the gas fleet has an elevated risk for extended outages.

July 14, 2023

David P. Wheeler, WT 2C-K

**RESPONSE TO REQUEST FOR MANAGEMENT COMMENTS – AUDIT 2022-17400 – GAS
PLANT CRITICAL SPARE PARTS**

Tennessee Valley Authority (TVA) Power Operations (PO) and Supply Chain (SC) appreciates the TVA Office of Inspector General's (OIG) review of the management of critical spares for the Power Operations Gas sites. The reliability of the bulk electric system, specifically meeting capacity demand, is one of TVA's top priorities. We value the OIG team's insight as it provides us an opportunity to further strengthen and improve our efforts of managing components critical to our generation fleet.

TVA management has reviewed the OIG memorandum dated May 15, 2023. Of the eight recommendations sited, six recommendations were shared with the auditors during the evaluation along with corrective actions for each.

We have incorporated those actions and the actions for newly identified items into the response below.

Recommendations:

1. Evaluate Critical Components to Identify Critical Spare Part Needs

Response:

Power Operations evaluates components to identify critical spares and uses this information to inform stocking levels. We recognize and acknowledge there are opportunities for data clean-up, which is currently being executed. We also recognize there are improvement opportunities associated with the guidance for the identification of needed spares and associated stocking levels and will work to develop such guidance when resources are available.

2. Establish a Governing SPP for Power Operations Critical Spare

Response:

The cancellation of the Power Operations SPP was identified as a gap prior to the evaluation. Power Operations and Supply Chain provided the draft replacement procedure during the audit; however, this was not acknowledged in the recommendations or findings. TVA's OIG has reviewed this procedure.

3. Associate Inventory items to the Components Where They Are Used

Response:

TVA recognizes this as an opportunity and is addressing it through efforts to clean up the data and associate spare parts to the Unique Identifier (UNIDs)/Assets.

David P. Wheeler
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4. Review All Critical Spare Parts to Verify They Are In Stock And Request To Stock As Necessary

Response:

Stocking of critical spares may take several forms. Power Operations and Supply Chain have partnered to assess stocking levels for gas spare parts including critical spares as a shared inventory approach. The groups will continue to engage with one another to ensure adequate availability and/or return to service of our generating assets that also achieves lower costs for the customers. Lead times, usage, number of sites with part on hand, reorder rules, criticality, region, and financial impact are all taken into account.

5. Evaluate Reorder Points for Critical Spare Parts to Ensure Continued Availability of Currently Stocked Items

Response:

Power Operations and Supply Chain have partnered to assess stocking levels for gas spare parts including critical spares as a shared inventory approach. This methodology is also included in the draft SPP for Gas Fleet Critical Spare Process. The process ensures TVA has critical and non-critical spare parts readily accessible throughout TVA when needed and may not be kept at every site.

6. Develop a Process to Ensure Preventive Maintenance is Performed on Critical Spare Parts While in Storage

Response:

Power Operations and Supply Chain will review process improvements for identifying materials that need preventive maintenance (PM) while in storage. Currently, PMs are performed on stored parts and some vendors perform these PMs. There are current PMs identified and listed within Maximo. The Brownsville Distribution Center (BDC) does not have a Maximo PM, as not all spare parts require a PM, for example, turn motor shafts do not require a PM.

7. Establish a Process to Ensure Long Term Service Agreement (LTSA) Covered Critical Spare Parts are Adequately Identified in Maximo

Response:

Supply Chain is currently working on an improved process for identification of the LTSA critical spares within Maximo.

8. Verify Storage Levels for Critical Spare Parts, Including Those with Electronic Components, to Ensure Proper Storage is Provided.

Response:

Power Operations and Supply Chain will take the opportunity to look for process improvements needed for items that require certain storage requirements and adjust as necessary.

David P. Wheeler
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CONCLUSION

Reliability Impact: TVA researched the past two years of forced outage data. The following is the impact on outage extensions for lack of critical spare parts:

Spare parts not on hand contributed to nineteen percent of Power Operations gas fleet forced outage extension days. Of this number, fifty-four percent is one event related to a generator rotor. Prior to the audit and as communicated to the auditor, we have made the decision to pursue a spare 7EA rotor for the generation fleet. With the generator rotor event excluded, this places spare parts not on hand contributing to only eight percent of Power Operations' gas fleet forced outage extensions.

The recommendations identified by the OIG during the evaluation will be reviewed to determine if additional actions outside of what has currently been identified and being worked by Power Operations and Supply Chain are needed. If additional actions or improvements are necessary, they will be prioritized, and actions documented.

We would like to thank Heather Kulisek (OIG Lead Auditor) for her professionalism in evaluating Gas Plant Critical Spare Parts. Thank you for allowing us to provide this response.



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Jacinda B. Woodward
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