The Tennessee Valley Authority (TVA) Safety Procedure (TSP) 18.221, *TVA Observation Program*,¹ states safety and accountability are core TVA values that ensure 9 million residents of the Tennessee Valley receive reliable and affordable power with each employee returning home safely to their families and communities. The TSP states, “It is TVA’s obligation to ensure that each employee embodies those values and identify areas, conditions, situations, and behaviors that could lead to an incident.” According to a SafetyNet² training presentation, TOP (1) provides a cohesive approach to recording and analyzing safety-related observation data, (2) allows the comparison of data across business units (BU), and (3) allows for management and nonmanagement observation recording. Due to the importance of identifying and correcting safety issues, we performed an evaluation to determine if corrective actions were being implemented to address observations identified through TOP.

We found corrective actions were generally being implemented to address observations identified through TOP. In addition, we found Local Health and Safety Committees (LHSC)³ were generally taking action to address negative trends in at-risk observations.⁴ However, we identified opportunities for improvement related to (1) at-risk observations that should not have been included as part of TOP, (2) documentation of corrective actions in SafetyNet, and (3) closure of some at-risk observations in SafetyNet.

We recommend the Senior Vice President, Transmission, Power Supply and Support, take actions related to the identified opportunities for improvement. Our detailed recommendations are listed in the body of this report.

In response to our draft report, TVA management accepted the evaluation conclusions and recommendations and provided planned actions for three of the four recommendations. See the Appendix for TVA’s complete response.

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¹ The TVA Observation Program is also referred to as TOP.
² SafetyNet is TVA’s application that allows observers to record and submit observations in real-time on a mobile device or to record observations at a desktop.
³ The principal function of the LHSC is to monitor and assist in the execution of TVA’s safety and health policies and programs at the workplaces within their jurisdiction.
⁴ At-risk observations identify behaviors, barriers, or conditions that put employees at risk. This could include behaviors or work environment.
BACKGROUND

TVA-TSP-18.221 states safety and accountability are core TVA values that ensure 9 million residents of the Tennessee Valley receive reliable and affordable power with each employee returning home safely to their families and communities. The TSP states, “It is TVA’s obligation to ensure that each employee embodies those values and identify areas, conditions, situations, and behaviors that could lead to an incident.” According to a SafetyNet training presentation, TOP (1) provides a cohesive approach to recording and analyzing safety-related observation data, (2) allows the comparison of data across BUs, and (3) allows for management and nonmanagement observation recording. The TSP establishes requirements for all TVA employees including managers, supervisors, foremen, individual contributors, and contractors (as applicable) to conduct observations throughout the Chief Operating Officer (COO) and TVA Nuclear strategic business units.

According to a SafetyNet training presentation, observations provide an open, honest, and safe forum for supervisors and employees to engage in conversations to provide objective feedback and coaching on behaviors, help identify exposures to risk and barriers, and improve safety culture. Observations are scheduled and planned based on work being performed. TVA-TSP-18.221 sets forth guidelines for conducting an observation, which include steps such as the observer (a) introducing themselves to the work crew, (b) being briefed on the nature of the job being performed, (c) inspecting the area, (d) observing employee work activities and techniques, (e) utilizing the observation checklist to record behaviors observed, (f) engaging in discussions of workplace safety with the employees at the conclusion of the observation, (g) reviewing the observation checklist with the observed employees, and (h) recording the observation in SafetyNet.

SafetyNet is TVA’s application that allows observers to record and submit safe and at-risk observations in real-time on a mobile device or to record observations at a desktop. According to a SafetyNet training presentation, inputting safe observations provides an opportunity for reward and recognition, and recording at-risk observations gives the opportunity to identify behaviors, barriers, or conditions that put employees at risk. When recording an at-risk observation, the observed condition or behavior can either be corrected immediately and closed, or if it cannot be corrected immediately, left open with a due date set by the observer.

According to TVA-TSP-18.221, managers/supervisors and LHSCs shall review and analyze results to determine common at-risk/unacceptable behaviors and develop and implement corrective actions when appropriate. In addition, TVA-TSP-18.007, Operate Certified Health and Safety Committees, provides for LHSCs to monitor site/facility safety-performance programs. The LHSC (1) reviews injury and observation data (i.e., SafetyNet, TVA’s Safety Dashboard,5 and Medgate6), (2) implements actions or initiatives to address negative trends, (3) encourages observation program participation based on local needs, and (4) submits and reviews safety suggestions.

5 Safety Dashboard is a summary of safety and observation data that extracts from multiple systems, which includes observations from SafetyNet. It allows the workforce to monitor safety statistics and quickly identify and correct negative safety trends.
6 Medgate is the TVA medical and safety software utilized to track safety incidents and medical case management.
Due to the importance of identifying and correcting safety issues, we performed an evaluation to determine if corrective actions were being implemented to address observations identified through TOP.

**OBJECTIVE, SCOPE, AND METHODOLOGY**

The objective of this evaluation was to determine if corrective actions were being implemented to address observations identified through TOP. The scope of the evaluation was observation data from COO and TVA Nuclear strategic business units during fiscal years (FY) 2017-2019. To achieve our objective, we:

- Interviewed TVA Safety personnel to gain an understanding of TOP, SafetyNet, and Safety Dashboard.
- Conducted surveys of LHSC members of BUs within COO and TVA Nuclear to determine how information from TOP is being utilized. We received responses from 31 of 33 LHSC members contacted.
- Identified the five at-risk observation categories with the most observations for COO and Nuclear BUs during FYs 2017–2019 utilizing Safety Dashboard and surveyed LHSC members to determine how the top five at-risk categories were addressed in their respective BUs.
- Selected a judgmental sample of 83 of the population of 994 at-risk observations opened and closed in FY 2019 to determine if corrective actions had been taken to address observations. At-risk observations were judgmentally selected based on severity. We selected all 53 at-risk observations with a severity rating of severe and high and randomly selected 30 at-risk observations with a severity of medium and low (15 of each).
- Reviewed available documentation and contacted responsible individuals for the 6 at-risk observations entered in SafetyNet in FY 2019 that remained open as of the end of FY 2019 to determine if (1) there were actions planned to address the observation and (2) any actions were past the due date assigned to them in SafetyNet.

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

**FINDINGS**

We found corrective actions were generally being implemented to address observations identified through TOP. In addition, we found LHSCs are generally taking action to address negative trends. However, we identified opportunities for improvement related to (1) at-risk observations that should not have been included as part of TOP, (2) documentation of corrective actions in SafetyNet, and (3) closure of some at-risk observations in SafetyNet.
CORRECTIVE ACTIONS WERE GENERALLY BEING IMPLEMENTED TO ADDRESS AT-RISK OBSERVATIONS

While there is not a specific requirement that corrective actions be taken for each observation, we found corrective actions were generally implemented to address at-risk observations identified through TOP. Specifically, we determined 77 of 83 at-risk observations in our sample had a corrective action taken or no additional actions were required based on documentation and information from the observer, a member of the LHSC, and/or SafetyNet. Examples of corrective actions taken to address observations include creating a work order, creating a condition report, or coaching employees.

For the remaining 6 at-risk observations from our sample, we could not determine if actions had been taken. Specifically:

- Four observations were entered in SafetyNet, indicating fire extinguishers should be checked. There were no work-order tickets, notes in SafetyNet, or other documentation to indicate the extinguishers were checked.
- One observation entered in SafetyNet concerned the frequency of individuals not stopping at a stop light at a plant entrance. We could not determine if corrective action was taken based on the information in SafetyNet. In addition, the observer did not get any feedback and was unsure who put the completion date in SafetyNet.
- One observation was a question about utilizing SafetyNet for clearance observations. The observer informed us no one had contacted him and was unsure how it was closed out in SafetyNet.

In addition, we reviewed 6 at-risk observations opened in FY 2019 and that remained open at the end of FY 2019. We found 3 were not closed at the time corrective actions were completed. For the remaining 3 observations, 1 had a due date of September 2019, but it did not appear to have any corrective action taken until January 2020. Two observations were not past their due date and had subsequently been addressed and closed out in SafetyNet.

LHSCs ARE GENERALLY TAKING ACTION TO ADDRESS NEGATIVE TRENDS

As discussed above, TVA-TSP-18.007 calls for LHSCs to monitor site/facility safety-performance programs. LHSCs should review injury and observation data, implement actions or initiatives to address negative trends, encourage observation program participation based on local needs, and submit and review safety suggestions. When asked how the top five at-risk observation categories for their BUs were being addressed, all LHSC members that responded (31 of 33 surveyed members) indicated they are taking corrective actions to address the top at-risk observation categories identified at their plant or within their BUs. Twenty-one of the LHSCs provided specific corrective actions taken to address the observations identified at their plant or in their BU, including: purchasing fall protection, installing crosswalks on raised cable trays to reduce trip hazards, and creating subcommittees to address top risks. Ten of the LHSCs informed us they addressed their top five at-risk observation categories through avenues such as, safety walkdowns, safety suggestions, and pre-job briefings.
OPPORTUNITIES FOR IMPROVEMENT
During our evaluation, we identified opportunities for improvement related to (1) at-risk observations that should not have been included as part of TOP, (2) documentation of corrective actions in SafetyNet, and (3) closure of some at-risk observations in SafetyNet.

Some At-Risk Observations Should Not Have Been Included as Part of the TOP
Based on TVA-TSP-18.221 and other documentation provided, we found a few instances where observations should not have been recorded in SafetyNet. TVA-TSP-18.221 and SafetyNet training material indicate observations are scheduled and planned based on work being performed. We noted what appeared to be unplanned at-risk observations in SafetyNet. In addition to the unsafe driving observation mentioned above, other informal observations included unsafe driving by a TVA employee, the use of cell phones when driving, and the lack of handrail use. According to a Safety employee, these informal observations should have been considered a “near miss”\(^7\) or a “good catch”\(^8\) and entered into Medgate rather than SafetyNet.

Documentation of Corrective Actions in SafetyNet
We found 52 of 83 closed observations in our sample did not have a corrective action listed in SafetyNet in the “action taken” field. Although the action taken field is not a required field in SafetyNet, documenting the corrective action taken when closing out an observation could help to ensure at-risk behaviors, barriers, or conditions that put employees at risk have been addressed.

Closure of Observations in SafetyNet
Our review of sampled at-risk observations identified issues related to timeliness of closure and uncertainty of who closed observations in SafetyNet. According to a SafetyNet training presentation, tracking observations to closure creates an accountability loop that ensures all issues are closed. If observations are not closed at the time the corrective action is taken, it could be an indication closures are not being completed as intended. Not closing the observation in a timely manner could result in inaccurate tracking.

Seventeen of our sample of 83 closed at-risk observations were not closed timely. The 17 observations were closed on average of 58 days (ranging between 2 and 287) following the completion of the corrective action. As mentioned above, we also reviewed 6 at-risk observations that remained open as of the end of FY 2019, and found 3 of these observations were not closed at the time corrective actions were completed.

We also received responses for 3 observations where the observers were unsure who closed out their observation in SafetyNet. According to a Safety employee, (1) an observer can close their own observation or the observation can be closed by anyone within that organization; and (2) when observations are left open, they reach out to the observer, determine the action taken, and close the observation. The ability for others to close observations they did not make could allow for inadvertent closure with no actions.

\(^7\) A near miss is an incident that did not result in injury or illness but had the potential to do so under slightly different conditions.

\(^8\) A good catch is a condition that has the potential to cause an event but did not due to a corrective action and/or timely intervention.
taken or discourage the observer from making future observations if they do not believe actions were taken to address their observation.

RECOMMENDATIONS

We recommend the Senior Vice President, Transmission, Power Supply and Support, (1) provide guidance to clarify what observations should be entered into SafetyNet, (2) consider making action taken a required field in SafetyNet, (3) communicate the importance of closing observations in SafetyNet when corrective actions are complete, and (4) provide guidance on who is responsible for closing observations.

TVA Management’s Comments – In response to our draft report, TVA management stated they accept the evaluation conclusions and recommendations and provided planned actions for three of the four recommendations. See the Appendix for TVA’s complete response.

Auditor’s Response – We concur with TVA management’s planned actions for three of the four recommendations.

This report is for your review and management decision. Your written comments, which addressed your management decision and actions planned for three of the recommendations, have been incorporated into the report. Please advise us of your management decision, for the recommendation related to making action taken a required field in SafetyNet, 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 need additional information, please contact Kristin S. Leach, Senior Auditor, at (423) 785-4818 or E. David Willis, Director, Evaluations at (865) 633-7376. We appreciate the courtesy and cooperation received from your staff during the evaluation.

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

KSL:FAJ
Attachment
cc: See page 7
cc (Attachment):
  TVA Board of Directors
  Jeffrey J. Lyash
  Justin C. Maierhofer
  Jill M. Matthews
  Preston P. Pratt
  Sherry A. Quirk
  Ronald R. Sanders II
  Michael D. Skaggs
  OIG File No. 2019-15662
April 10, 2020
David P. Wheeler, WT 2C-K

RESPONSE TO REQUEST FOR COMMENTS – DRAFT EVALUATION 2019-15662-TVA
OBSERVATION PROGRAM

In accordance with the request dated April 8, 2020, TVA has reviewed the subject draft report
2019-15662 and accepts the evaluation conclusion and recommendations.

In the draft report, OIG made four specific recommendations as shown below with expected
completion dates.

- Provide guidance to clarify data types to be entered into Safety systems – SafetyNet and
  Medgate (September 30, 2020)
- Consider making action taken, a required field in SafetyNet (July 31, 2020)
- Communicate the importance of closing observations in SafetyNet when corrective
  actions are complete (September 30, 2020)
- Provide guidance on who is responsible for closing observations (September 30, 2020)

We wholeheartedly agree that safety and accountability are core TVA values. The identified
recommendations capture the spirit of these values and are important opportunities to improve
our safety programs at TVA. Thank you to the audit team for their hard work and meaningful
review of our observation program.

Preston P. Pratt
Director of Safety and Enterprise Improvement
BR 4 C

PPP:GLH

cc: James R. Dalrymple
    Robertson D. Dickens
    Preston P. Pratt
    Sherry A. Quirk
    Ronald R. Sanders, II
    Michael D. Skaggs
    OIG File No. 2019-15662