Memorandum from the Office of the Inspector General

April 17, 2019

Jacinda B. Woodward, LP 2K-C

REQUEST FOR FINAL ACTION – EVALUATION 2018-15585 – GAS PLANT EMERGENCY PREPAREDNESS AND RESPONSE

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 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 Christopher E. Sheets, Senior Auditor, at (865) 633-7362 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)
WT 2C-K

CES:FAJ
Attachment
cc (Attachment):
TVA Board of Directors
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Janet J. Brewer, WT 7C-K
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Michael D. Skaggs, WT 7B-K
Rebecca C. Tolene, WT 7B-K
OIG File No. 2018-15585
GAS PLANT EMERGENCY PREPAREDNESS AND RESPONSE
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>C&amp;EM</td>
<td>Crisis and Emergency Management</td>
</tr>
<tr>
<td>CC</td>
<td>Combined Cycle</td>
</tr>
<tr>
<td>CPG 101</td>
<td>Comprehensive Preparedness Guide</td>
</tr>
<tr>
<td>CT</td>
<td>Combustion Turbine</td>
</tr>
<tr>
<td>DHS</td>
<td>U.S. Department of Homeland Security</td>
</tr>
<tr>
<td>ERP</td>
<td>Emergency Response Plan</td>
</tr>
<tr>
<td>GETS</td>
<td>Government Emergency Telecommunications Service</td>
</tr>
<tr>
<td>IC</td>
<td>Incident Commander</td>
</tr>
<tr>
<td>ICP</td>
<td>Incident Command Post</td>
</tr>
<tr>
<td>NIMS</td>
<td>National Incident Management System</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PA</td>
<td>Public Address</td>
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<tr>
<td>PO</td>
<td>Power Operations</td>
</tr>
<tr>
<td>SPP</td>
<td>Standard Programs and Processes</td>
</tr>
<tr>
<td>SVP</td>
<td>Senior Vice President</td>
</tr>
<tr>
<td>TVA</td>
<td>Tennessee Valley Authority</td>
</tr>
<tr>
<td>WebEOC</td>
<td>Web-Based Emergency Operations Center</td>
</tr>
<tr>
<td>WPS</td>
<td>Wireless Priority Service</td>
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MEMORANDUM DATED APRIL 5, 2019, FROM JACINDA B. WOODWARD TO DAVID P. WHEELER
EXECUTIVE SUMMARY

Why the OIG Did This Evaluation

The Tennessee Valley Authority (TVA) could be impacted by a wide spectrum of emergency incidents such as natural, man-made/technological, or terroristic occurrences. TVA's Emergency Management Program is intended to ensure TVA organizations respond effectively and consistently to all incidents.

Due to the importance of effective response in the event of an emergency, we conducted an evaluation of emergency preparedness and response at TVA gas plants. The objectives of our evaluation were to determine if (1) emergency response plans (ERP) at gas plants were up to date and (2) required systems were available and functional.

What the OIG Found

We found 10 of 17 ERPs for gas plants were not reviewed on a timely basis based on TVA’s requirement for an annual review, and all contained inaccurate contact information. We also found some systems required in ERPs were not available or functional. Specifically, we observed availability or functionality issues with at least two of four emergency alerting and notification systems tested at all 6 gas plants visited. We also noted two user aids were unavailable to anticipated TVA users at most gas plants. In addition, we observed inadequate emergency lighting in designated incident command posts during site visits at 4 gas plants.

What the OIG Recommends

We recommend the Senior Vice President, Power Operations (1) review and update out-of-date site ERPs, (2) remediate availability and functionality issues with emergency response systems, (3) evaluate the adequacy of visual aids where audible alarms may not be heard, (4) improve availability of two user aids at gas plants, and (5) evaluate the adequacy of emergency lighting in designated incident command posts at gas plants, and make modifications where necessary.

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1 Emergency management SPPs identify additional job aids to be used in emergency situations such as the Government Emergency Telecommunications Service, Wireless Priority Service, and Web-Based Emergency Operations Center.
EXECUTIVE SUMMARY

TVA Management’s Comments

In response to our draft report, TVA management stated that actions have been, or will be, taken to address the recommendations. See the Appendix for management’s complete response.

Auditor’s Response

We concur with TVA management’s planned and completed actions and will verify completion prior to closing the recommendations.
BACKGROUND

The Tennessee Valley Authority (TVA) could be impacted by a wide spectrum of emergency incidents such as natural, man-made/technological, or terroristic occurrences. TVA’s Emergency Management Program is intended to ensure its organizations respond effectively and consistently to all incidents.

The U.S. Department of Homeland Security (DHS) issues guidance and best practices on emergency management for all levels of government as well as the private and nongovernmental sectors. In 2004, DHS released its original guide to incident management—known as the National Incident Management System (NIMS)—to provide a common approach to sharing resources, coordinating and managing incidents, and communicating information. NIMS guidance suggests incidents are best handled at the lowest possible organizational level. According to TVA, as an incident grows in complexity and/or size, TVA sites and organizations may require activation of other external response agencies for assistance. Accordingly, TVA established emergency response plans (ERP) at multiple organizational levels, including a site plan for each of TVA’s gas plants, a Power Operations (PO) emergency plan—Standard Programs and Processes (SPP), PO-SPP-35.001, Power Operations Emergency Plan—and an agency-level plan—TVA-SPP-35.100, Agency Emergency Response Plan. TVA-SPP-35.200, Emergency Preparedness Programs, indicates emergency programs should address the following areas, among others:

- Compliance with applicable laws and authorities.
- Prevention and mitigation strategies to limit or control the consequences, extent, or severity of an incident.
- Incident management structures consistent with the Incident Command System.
- Identification of threats, hazards, and risks.
- Written emergency plans, processes, and procedures.
- Facilities and equipment to execute the program, including redundant capabilities.
- Mutual aid or agreements for maintaining effective interfaces.

TVA-SPP-35.000, Emergency Management, establishes roles and responsibilities for nonnuclear emergency management programs. TVA’s Crisis and Emergency Management (C&EM) group is responsible for the establishment, maintenance, and implementation of TVA emergency management activities. Each organization is responsible for emergency management and response programs within their respective organizations, with oversight of emergency plans provided by C&EM. According to TVA-SPP-35.200, emergency preparedness program coordinators establish their programs to adhere to the provisions of this SPP and ensure the programs are reviewed,
maintained, and implemented to provide operational readiness for effective emergency response.

Site emergency response plans (ERP) define roles and responsibilities of plant personnel, provide for emergency response facilities, identify user aids for the incident management team, and detail emergency reporting and notification requirements. Additionally, ERPs provide details regarding specific emergency scenarios. For example, emergency plans detail notification protocols for fires and hazardous material releases.

According to site ERPs, emergency response priorities (1) protect life and treat injured personnel; (2) evaluate potential impacts offsite; (3) protect property, processes, and the environment; (4) manage risks to the citizens and resources of the Valley and region; and (5) prompt completion of regulatory and TVA required notifications, documentation, and processes. Plans provide for emergency notification systems to be used to warn employees of emergency conditions. ERPs also provide phone numbers to call in the event of an emergency.

DHS also issued guidelines for the development and maintenance of emergency plans, commonly referred to as the Comprehensive Preparedness Guide (CPG) 101. CPG 101 indicates plan reviews should be a recurring activity, and in no case should any part of the plan go for more than 2 years without being reviewed and revised. CPG 101 advises planning teams to consider reviewing and updating the plan after certain events including major incidents and changes in operational resources (e.g., policy, personnel, organizational structures, management processes, facilities, equipment). The guidelines caution:

Plans must not be placed on a shelf to collect dust!

Whenever possible, training and exercise must be conducted for each plan to ensure that current and new personnel are familiar with the priorities, goals, objectives and courses of action.

Plan maintenance is also critical to the continued utility of the plans an organization has developed. A number of operations have had setbacks due to old information, ineffective procedures, incorrect role assignments, and outdated laws.

Due to the importance of an effective response in the event of an emergency, we conducted an evaluation of emergency preparedness and response at TVA gas plants.

1 Emergency management SPPs identify additional job aids to be used in emergency situations such as the Government Emergency Telecommunications Service (GETS), Wireless Priority Service (WPS), and Web-Based Emergency Operations Center (WebEOC).
OBJECTIVE, SCOPE, AND METHODOLOGY

Our objectives were to determine if (1) ERPs at gas plants were up to date and (2) required systems were available and functional. The scope of our evaluation included ERPs in effect on August 1, 2018, and systems included in plans for alerting employees to emergency conditions and making emergency notifications. To achieve our objectives, we:

- Reviewed the following TVA SPPs, DHS guidance, and federal regulations applicable to our evaluation to gain an understanding of emergency management systems and responses:
  - TVA-SPP-35.000, Emergency Management
  - TVA-SPP-35.100, Agency Emergency Response Plan
  - TVA-SPP-35.200, Emergency Preparedness Programs
  - PO-SPP-35.001, Power Operations Emergency Plan
  - DHS guidance, including NIMS and CPG 101
  - Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations §1910.165, “Employee alarm systems”
- Interviewed PO and C&EM personnel to gain an understanding of the emergency preparedness and response processes and systems.
- Obtained and reviewed ERPs for TVA gas plants\(^2\) in effect on August 1, 2018, to identify (1) the most recent review dates, (2) emergency contact information, and (3) required emergency response systems.
- Verified the accuracy of contact information in gas plant ERPs.
- Reviewed access records for the GETS, WPS, and WebEOC to determine whether these user aids were available to appropriate personnel at gas plants.
- Conducted site visits for a judgmentally selected sample of gas plants to test availability and functionality of required emergency systems. We selected the following plants based on a combination of megawatt and oil capacities: Allen Combined Cycle (CC), Gallatin Combustion Turbine (CT), John Sevier CC, Johnsonville CT, Lagoon Creek CT, and Paradise CC. For these sites, we:
  - Interviewed individuals with responsibility for maintaining the site’s ERP to ensure we reviewed the most current plan.
  - Observed testing of required alerting and notification systems listed in the ERPs; i.e., public address (PA) system, alarm, phone, and radio systems.

\(^2\) TVA owned and operated 17 gas plants as of August 1, 2018.
Conducted keyword searches in Maximo\(^3\) and reviewed relevant condition reports\(^4\) as well as associated work orders to identify emergency system issues.

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 AND RECOMMENDATIONS**

We determined gas plant ERPs were not reviewed on a timely basis or were not up to date. We observed availability or functionality issues with at least two of four emergency alerting and notification systems tested at all 6 sites visited, and we determined two user aids were unavailable to anticipated users. In addition, we identified issues with emergency lighting in designated incident command posts (ICP).

**ERPs FOR GAS PLANTS WERE NOT REVIEWED ON A TIMELY BASIS OR WERE NOT UP TO DATE**

TVA-SPP-35.200, *Emergency Preparedness Programs*, Section 3.7, requires an annual review of site emergency plans. The PO Program Manager for Emergency Preparedness and Response assigned action tracking items in Maximo to each plant as a reminder to review emergency plans timely. However, we reviewed gas plant ERPs in effect on August 1, 2018, and found 10 of 17 ERPs had not been reviewed within the past year. See Table 1 on the following page for details.

\(^3\) Maximo is TVA’s work management system.

\(^4\) Condition reports are created to record how problems are found, analyzed, and resolved. We searched for conditions reported between January 1, 2017, and August 1, 2018, with keywords for systems related to our evaluation.
ERPs Not Reviewed in Over 1 Year

<table>
<thead>
<tr>
<th>Plant</th>
<th>ERP Effective Date (as of August 1, 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caledonia CC</td>
<td>April 17, 2017</td>
</tr>
<tr>
<td>Gleason CT</td>
<td>January 26, 2017</td>
</tr>
<tr>
<td>John Sevier CC</td>
<td>January 4, 2017*</td>
</tr>
<tr>
<td>Johnsonville CT</td>
<td>November 28, 2016</td>
</tr>
<tr>
<td>Kemper CT</td>
<td>May 31, 2013*</td>
</tr>
<tr>
<td>Lagoon Creek CC</td>
<td>April 1, 2016*</td>
</tr>
<tr>
<td>Lagoon Creek CT</td>
<td>March 10, 2015*</td>
</tr>
<tr>
<td>Magnolia CC</td>
<td>March 2, 2017*</td>
</tr>
<tr>
<td>Marshall CT</td>
<td>September 1, 2016*</td>
</tr>
<tr>
<td>Paradise CC</td>
<td>February 1, 2017*</td>
</tr>
</tbody>
</table>

*Site ERPs were updated or provided to PO personnel for approval between August 15, 2018, and November 20, 2018.

Table 1

Due to the risk of incorrect information and role assignments in ERPs negatively impacting a response, we called contacts listed in ERPs for all gas plants. All 17 ERPs needed updates to emergency contact information. Specifically, we determined approximately 34 percent of emergency contact information provided in gas plant ERPs was incorrect. The emergency contact error rates for each gas plant ranged from 18 percent (Magnolia CC) to 51 percent (Gallatin CT). Errors included numerous incorrect phone numbers and contact names as well as numbers identified as not preferred by the organizations for reporting emergencies. For example, we found:

- Incorrect contacts or numbers for 7 plant managers and 3 foremen.
- Twelve contacts for external emergency agencies that were not located in the same state as the gas plant.
- Two phone numbers of former TVA employees who left the agency more than 4 years ago.

**Recommendations**
We recommend the Senior Vice President (SVP), PO, review and update (1) all ERPs that do not comply with the annual review frequency guidelines in TVA-SPP-35.200 and (2) contact information contained in all gas plant ERPs.

**TVA Management’s Comments** – TVA management stated all gas plant ERPs have been updated and a cadence for future reviews has been established. See the Appendix for management’s complete response.

**Auditor Response** – We concur with TVA management’s actions and will verify completion prior to closing the recommendation.
SOME SYSTEMS IN ERPs WERE NOT AVAILABLE OR FUNCTIONAL

We found some systems required in ERPs were not available or functional. Specifically, we observed availability or functionality issues with at least two of four emergency alerting and notification systems tested at all 6 sites visited. Additionally, we determined two user aids not owned or maintained by TVA were unavailable to anticipated users at most gas plants.

Some Required Emergency Systems Not Available or Functional

Emergency alerting and notification systems are critical to inform employees of life-threatening conditions. We visited 6 sites, and observed tests of emergency response systems on various dates from September through October 2018. While onsite, we observed availability or functionality issues with at least two of four systems tested at all 6 sites. The issues included availability or functionality of PA systems at all 6 plants and availability or functionality issues with alarms and phones at some sites. No issues were noted with the use of radios at gas plants. See Table 2 below for the results of our testing at each of the 6 sites.

<table>
<thead>
<tr>
<th>Plant</th>
<th>Date</th>
<th>Paging/PA</th>
<th>Alarms</th>
<th>Phones</th>
<th>Radios</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Sevier CC</td>
<td>9/17/2018</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Paradise CC</td>
<td>9/24/2018</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Gallatin CT</td>
<td>9/25/2018</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Allen CC</td>
<td>10/29/2018</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Lagoon Creek CT</td>
<td>10/30/2018</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Johnsonville CT</td>
<td>10/30/2018</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 2

PA System

Site ERPs state employees should listen carefully to fire information announced over the PA system. We noted availability issues with three PA systems and functionality issues with the remaining three PA systems. The lack of availability and functionality of PA systems at gas plants could either prevent or limit necessary instructions to plant personnel in the event of an emergency.

Although both Gallatin and Lagoon Creek CT’s ERPs stated employees should heed information provided over the PA system during fire and natural gas pipeline emergencies, neither site had a PA system. Allen CC personnel stated the PA system was unavailable due to a faulty microphone. Site personnel later stated the PA system was actually available and functional but they were unaware the system had to be activated up to 30 seconds before use. As a result of this operating deficiency, TVA management created a training course to improve the proficiency of plant staff who utilize emergency notification systems.

We also noted functionality issues with the PA systems at Johnsonville CT, John Sevier CC, and Paradise CC. Five announcement attempts were made over the PA system at Johnsonville CT. We were only able to hear an announcement on...
one of the five attempts but could not understand what was being announced. At both John Sevier and Paradise CC plants, we were unable to hear announcements at selected locations.

**Alarm Systems**
According to OSHA 29 Code of Federal Regulations §1910.165, “Employee alarm systems,” employee alarm systems shall provide warning for necessary emergency action as called for in the emergency action plan, or for reaction time for safe escape of employees from the workplace or the immediate work area, or both. Such systems should be capable of being perceived above ambient noise or light levels by all employees and be distinctive and recognizable as a signal to evacuate the work area or perform actions designated under the emergency action plan. OSHA requires employers to maintain all employee alarm systems in operating condition except when undergoing repairs or maintenance. ERPs for TVA’s gas plants state site alarms are sounded to notify plant personnel of certain incidents but do not address visual aids such as strobe lights to be used in conjunction with audible alarms.

During our site visits, we observed availability or functionality issues with the alarm systems at 5 gas plants. We had difficulty hearing all alarms at John Sevier CC, and alarms were completely inaudible at various areas at Lagoon Creek CT and Johnsonville CT. Additionally, we were unable to hear alarms on the bottom floor of the generator building at Allen CC because the turbine was in operation. No visual aids such as strobe lights were observed in the vicinity to notify plant personnel that alarms had been activated. Although all alarms were audible at Paradise CC, personnel had difficulty turning off the fire, chemical, and general alarms through normal procedures. The alarm system was reset and the alarms turned off within a few minutes.

The availability and functionality issues we observed with alarm systems at gas plants generally indicate a lack of (1) site-wide coverage of audible alarms or (2) visual aids to assist with identification of an emergency situation while units are active. Without functional alerting and notification systems, there is an increased risk to employee safety.

**Phone System**
Site ERPs direct personnel to call the phone number of the site control room or call by radio during a fire, natural gas pipeline, or medical emergency. During our site visits, we randomly tested phones for a dial tone throughout different site locations. During our site visit to Johnsonville CT, we entered the CT Unit No. 12 control cab and observed the phone receiver laying on the floor. We were unable to detect a dial tone or place a call after several attempts. We also noted the phone inside the CT Unit No. 4 control cab at Gallatin CT was not working. While employees generally carry hand-held radios at gas plants, the phone system could be the primary method of communication if plant personnel are not carrying radios or radios become dysfunctional.
Radio System
According to site emergency plans, radios may be used as a form of communication in the event of an emergency. We observed uninterrupted communications through the radios at all gas sites visited. No issues were noted.

Recommendations
We recommend the SVP, PO, (1) remediate functional issues with required emergency systems including PA systems, alarms, and phones and (2) perform a comprehensive review of speaker coverage at all gas plant facilities and evaluate the adequacy of emergency visual aids for locations in which an audible alert may not be available.

TVA Management's Comments – TVA management stated (1) the identified functional issues will be assessed and a strategy will be established to address the nonfunctional emergency response systems by April 1, 2020, and (2) PO will revise gas plant ERPs to require all personnel to evacuate to muster locations when the site-wide emergency alarm is activated. Additionally, a review of the adequacy of current speaker or siren coverage areas and visual aids will be performed. See the Appendix for management’s complete response.

Auditor's Response – TVA management subsequently informed us their intent was to complete their assessment and remediation of the nonfunctional emergency system issues by April 1, 2020. Based on this time frame, we concur with TVA management’s planned actions.

Two User Aids Were Not Available at Most Gas Plants
Emergency management SPPs identify emergency operations resources and job aids to be used in emergency situations, including:

- GETS cards to provide priority access and processing for local and long-distance segments of landline networks.
- WPS to prioritize calls made over cell phones.
- WebEOC for documenting, sharing incident information, and situational awareness.

We did not test functionality for these systems because they are not owned or maintained by TVA. We reviewed the three systems to determine their availability for anticipated users at gas plants and found GETS and WPS were unavailable to incident commanders (IC) at most gas plants.

According to the PO Program Manager, Emergency Preparedness and Response, for small events, the IC is normally the site manager, foreman, or dual rate tech5 for CT plants and operations manager or lead tech on duty for CC plants. We found 2 of 49 personnel eligible to serve in the IC role had been issued a GETS card and 1 of 49 possessed a WPS-enabled device. In the case

5 A dual rate tech is a CT tech who covers a shift when a site manager or foreman is unavailable.
of a larger event, the plant manager may appoint a more experienced IC or assume the role personally.\textsuperscript{6} We identified 3 of 15\textsuperscript{7} active plant managers had a GETS card and no active plant managers possessed a WPS-enabled device. Plants are provided a common username and password for WebEOC, allowing all relevant personnel to access the system.

The ERPs do not identify personnel responsible for maintaining access to the user aids. The PO Program Manager, Emergency Preparedness and Response, who is responsible for coordinating GETS and WPS access with DHS, acknowledged difficulty in managing access to these systems, especially for WPS after TVA allowed employees to use their own cellular devices.

**Recommendation**
We recommend the SVP, PO, establish plant personnel responsible for maintaining GETS and WPS access and coordinate access through DHS.

**TVA Management’s Comments** – TVA management stated GETS and WPS will be assigned for each site. See the Appendix for management’s complete response.

**Auditor’s Response** – We concur with TVA management’s planned actions.

**ADDITIONAL INFORMATION**

In addition to the findings discussed above, we observed emergency lighting did not exist or was nonfunctional in the areas identified as ICPs by site ERPs at Allen CC, Lagoon Creek CT, Johnsonville CT, and John Sevier CC. Emergency lighting did not exist in the areas designated as ICPs at Allen CC, Johnsonville CT, and the alternate ICP at Lagoon Creek CT, and one light bank did not activate at John Sevier CC. Inadequate emergency lighting could impact the ability of plant management to adequately respond in the event of an emergency.

**Recommendation**
We recommend the SVP, PO, evaluate the adequacy of emergency lighting in designated ICPs at gas plants, and make modifications where necessary.

**TVA Management’s Comments** – TVA management stated the adequacy of emergency lighting in the identified ICP[s] and administrative area[s] of the active gas plants will be evaluated against applicable governing standards and if necessary, emergency lighting modifications will be made. See the Appendix for management’s complete response.

**Auditor’s Response** – We concur with TVA management’s planned actions.

\textsuperscript{6} The ERP for Lagoon Creek CC provided for the operations manager to serve as the IC for larger events.

\textsuperscript{7} Two plants did not have active plant managers at the time of our evaluation.
April 5, 2019

David P. Wheeler, WT 2C-K

MANAGEMENT RESPONSE - DRAFT EVALUATION 2018-15585 - GAS PLANT
EMERGENCY PREPAREDNESS AND RESPONSE

This is in response to your memorandum dated March 8, 2019. First, let me thank your team for the professional manner in which this audit was conducted. After review of the draft evaluation, please see the following response to the recommendations regarding Gas Plant Emergency Preparedness and Response.

Recommendations

1. We recommend the Senior Vice President (SVP), PO, review and update (1) all ERPs that do not comply with the annual review frequency guidelines in TVA-SPP-35.200 and (2) contact information contained in all gas plant ERPs.

   Response
   All gas plant ERPs have been updated. A cadence for future reviews has been established.

2. We recommend the SVP, PO, (1) remediate functional issues with required emergency systems including PA systems, alarms, and phones and (2) perform a comprehensive review of speaker coverage at all gas plant facilities and evaluate the adequacy of emergency visual aids for locations in which an audible alert may not be available.

   Response to Recommendation (1)
   The functional issues identified will be assessed and a strategy will be established to address the existing non-functional emergency response systems as identified in the draft report which are the chemical alert, fire alert, PA system, in-plant phones, and radio systems.
   Owner - Larry Sparks
   Due Date - April 1, 2020

   Response to Recommendation (2)
   Power Operations will revise the gas plants' emergency response plans to require all personnel to evacuate to muster locations when the site-wide emergency alarm is activated. A review of the adequacy of current speaker or siren coverage areas and visual aids will also be performed to ensure onsite personnel are able to either hear the site-wide emergency alarm or see the visual aids. Plant operations equipped with hand
held radios will be responsible for ensuring evacuations are conducted including annual testing and evacuation drills per NFPA requirements.
Owner - Larry Sparks
Due Date - April 1, 2020

3. We recommend the SVP, PO, establish plant personnel responsible for maintaining GETS and WPS access and coordinate access through DHS.

Response
GETS and WPS will be assigned for each site.
Owner - William Rose
Due Date - November 1, 2019

4. We recommend the SVP, PO, evaluate the adequacy of emergency lighting in designated ICPs at gas plants, and make modifications where necessary.

Response
The adequacy of the emergency lighting in the identified incident command post and administrative area of the active gas plants will be evaluated against applicable governing standards and if necessary, modifications will be made to emergency lighting in planned incident command posts and administrative areas of active gas plants.
Owner - Larry Sparks
Due Date - April 1, 2020

Thank you for the opportunity to provide these comments. If you need additional information, please let me know.

Jacinda B. Woodward
Senior Vice President
Power Operations
LP 2K-C

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cc: See page 3
David P. Wheeler  
Page 3  
April 5, 2019

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