September 24, 2018

Brian E. Brigman, MPB 1A-SQN

REQUEST FOR MANAGEMENT DECISION – EVALUATION 2018-15550 – ORGANIZATIONAL EFFECTIVENESS – SEQUOYAH NUCLEAR PLANT SITE SECURITY

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 audits that remain unresolved after 6 months from the date of report issuance.

If you have any questions or wish to discuss our findings, please contact Andi R. McCarter, Senior Auditor, at (423) 785-4831 or Lisa H. Hammer, Director, Evaluations – Organizational Effectiveness, at (865) 633-7342. 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

ARM:KDS
Attachment
cc (Attachment):
    TVA Board of Directors   William D. Johnson, WT 7B-K
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TVA

Office of the Inspector General   *Evaluation Report*

To the Senior Manager,
Sequoyah Nuclear Plant
Site Security

ORGANIZATIONAL EFFECTIVENESS – SEQUOYAH NUCLEAR PLANT SITE SECURITY

Evaluation Team
Andi R. McCarter
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<u>ABBREVIATIONS</u>

CFR	Code of Federal Regulations
CR	Condition Report
FY	Fiscal Year
NPG	Nuclear Power Group
NRC	Nuclear Regulatory Commission
SMART	Specific, Measurable, Achievable, Relevant, and Time-Bound
SPP	Standard Programs and Processes
SQN	Sequoyah Nuclear Plant
SS	Site Security
TVA	Tennessee Valley Authority

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APPENDIX

TVA VALUES AND LEADERSHIP COMPETENCIES

Why the OIG Did This Evaluation

Organizational effectiveness, as defined in this evaluation, is the ability of an organization to achieve its mission and goals. To achieve and sustain organizational effectiveness, there should be alignment between strategy, team engagement, and operational performance. Specifically, values and behaviors that drive good performance should be embedded throughout the organization's business processes and exemplified by the individuals that manage and work in the organization. The Tennessee Valley Authority's (TVA) 2017 3-year Enterprise Risk Profile recognized that ongoing workforce refinement[i] might negatively affect the performance environment. Therefore, employee engagement is critical.

Due to the importance of alignment between strategy, team engagement, and operational performance, the Office of the Inspector General is conducting organizational effectiveness evaluations of business units across TVA. This evaluation focused on Sequoyah Nuclear Plant's (SQN) Site Security (SS) organization.

SQN SS is responsible for maintaining physical security at SQN through its workforce and execution of its security plans. In addition, SQN SS is responsible for interfacing with federal, state, and local agencies on security-related issues. As of February 15, 2018, SQN SS had 172 employees, including management. The objective of this evaluation was to identify strengths and risks that could impact SQN SS's organizational effectiveness.

What the OIG Found

We identified strengths related to (1) organizational alignment, (2) teamwork, and (3) frontline[ii] management support. However, we also identified risks that could impact the effectiveness of SQN SS to achieve its responsibilities in support of the Nuclear mission. These risks included (1) ineffective senior management support related to communication, accountability, behaviors, and resources; and (2) perceptions of unethical actions.

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[i] Refinement of the workforce includes activities such as reduction in force.

[ii] Frontline management includes shift supervisors and shift managers.

Based on our findings and using TVA's Business Operating Model, we assessed SQN SS's level of risk in the areas of alignment, engagement, and execution. As summarized in the table below:

- Alignment risk is low based on the alignment of management and employee goals, which supported the Nuclear mission. In addition, SQN SS priorities aligned to the Nuclear and TVA missions.

- Engagement risk is medium. While employees cited teamwork and support from frontline management as a strength, employees described concerns with communication, accountability, behaviors, and resources that indicate ineffective senior management support. These concerns along with the perceptions of unethical actions can impact the engagement of the employees in SS.

- Execution risk is rated low based on (1) limited instances of plant support deficiencies from security and (2) actions taken or in process to address concerns related to communication tools.

	Low Risk	Medium Risk	High Risk
Alignment	X		
Engagement		X	
Execution	X		

What the OIG Recommends

We recommend management address the engagement risk of insufficient senior management support by (1) improving communication, (2) providing consistent accountability, (3) addressing management behaviors not in alignment with leadership competencies, and (4) evaluating staffing levels. We also recommend management determine if unethical actions are occurring. Our detailed recommendations are listed in the body of this report.

TVA Management's Comments

The Senior Manager, SQN SS, had no comments on the draft of this report.

BACKGROUND

Organizational effectiveness, as defined in this evaluation, is the ability of an organization to achieve its mission and goals. To achieve and sustain organizational effectiveness, there should be alignment between strategy, team engagement, and operational performance. Specifically, values and behaviors that drive good performance should be embedded throughout the organization's business processes and exemplified by the individuals that manage and work in the organization.

In recent years, the Tennessee Valley Authority (TVA) has faced internal and external economic pressures and implemented cost-cutting measures in an attempt to keep rates low and reliability high while continuing to fulfill its broader mission of environmental stewardship and economic development. TVA's 2017 3-year Enterprise Risk Profile recognized that ongoing workforce refinement[1] might negatively affect the performance environment. Therefore, employee engagement is critical.

Due to the importance of alignment between strategy, team engagement, and operational performance, the Office of the Inspector General is conducting organizational effectiveness evaluations of business units across TVA. This evaluation focused on Sequoyah Nuclear Plant's (SQN) Site Security (SS) organization. SQN SS is responsible for maintaining physical security at SQN through the execution of its security plans. The organization supports TVA's core safety[2] value as well as Nuclear Power Group's (NPG) mission of generating safe, reliable, and affordable electricity. In addition, SQN SS is responsible for interfacing with federal, state, and local agencies on security-related issues.

Nuclear security functions are regulated by the Nuclear Regulatory Commission (NRC), whose responsibility is to regulate commercial nuclear power plants through licensing, inspection, and enforcement of its requirements. TVA's overall Nuclear Security Program is driven by the regulatory requirements laid out in 10 Code of Federal Regulations (CFR) Part 73, Physical Protection of Plants and Materials, and 10 CFR 26, Fitness for Duty Programs.

In general, 10 CFR 73 sets forth obligations for establishing and maintaining a physical protection system for the purpose of protecting, among other things, special nuclear material and the nuclear power plants where those special nuclear materials are used. 10 CFR 73 includes requirements for:

- Physical protection systems, subsystems, components, and procedures.

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[1]   Refinement of the workforce includes activities such as reduction in force.

[2]   The safety value is described as "a professional and personal commitment to protect the safety of our employees, our contractors, our customers, and those in the communities that we serve."

- Access of persons, vehicles, and materials into material access areas and vital areas.[3]

- Activities and conditions within protected areas,[4] material access areas, and vital areas.

- Implementation of a physical security plan for establishing, maintaining, and executing NRC security requirements.

- Implementation of the Security Training and Qualification Plan.

- Reporting of events that represent an attempted, threatened, or actual breach of the security system or a reduction of operational effectiveness of that system.

- Minimum qualifications and training requirements for security personnel.

The NRC also requires a Fitness For Duty program in 10 CFR 26 and sets forth certain obligations to provide reasonable assurance that individuals are able to safely and competently perform duties commensurate with maintaining public health and safety. TVA plant SS along with TVA's Nuclear Corporate Security (who provides oversight and technical advice to plant SS) are responsible for compliance with applicable requirements in 10 CFR 73 and 10 CFR 26. TVA's method for addressing these NRC requirements is proceduralized through NPG policies and procedures.

SQN SS tracks behavioral and operational performance factors to assist with achieving and maintaining regulatory compliance. Behaviors are observed periodically and tracked as to whether desired expectations are met as part of TVA Nuclear's Electronic Performance Observation Program. SQN SS also tracks performance indicators as required by the NRC. For calendar year 2017, key performance indicators that were tracked included the following: (1) 24-hour security-related loggable events,[5] (2) closed-circuit television compensatory hours,[6] and (3) intrusion detection system compensatory hours.[7]

As of February 2018, SQN SS includes two departments—SS and Security Support:

- SS primarily consists of officers who report to shift supervisors and shift managers. These individuals are responsible for the protection of SQN and its personnel by carrying out duties consistent with NRC requirements, SQN's

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[3] Vital areas, as defined by the NRC, is an area that contains "any equipment, system, device, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety."

[4] The protected area, as defined by the NRC, is "an area encompassed by physical barriers and to which access is controlled."

[5] Security events that require documentation on the security event log within 24 hours of discovery.

[6] Hours expended in posting a security officer as required compensation for camera unavailability because of degradation or defects.

[7] Hours expended in posting a security officer as required compensation for intrusion detection system unavailability because of degradation or defects.

physical security plan, and applicable security-related TVA and SQN policies and procedures. Security workforce duties include (1) processing vehicles, cargo, and individuals at the security checkpoint; (2) monitoring all patrol routes and the vehicle barrier system to detect any indications of tampering, unauthorized persons, vehicles, materials, and/or activities; and (3) successfully completing required training and requalification tasks. Additionally, SS is responsible for monitoring and testing security equipment to verify such equipment is operating as expected.

- Security Support is tasked with (1) implementation of SQN's Security Training and Qualification Plan; (2) development, coordination, and supervision of security drills; and (3) tracking the SQN security workforce's compliance with Appendix B of 10 CFR 73 (General Criteria for Security Personnel), SQN's physical security plan, and other regulations.

As of February 15, 2018, SQN SS had 172 employees, including management. As of that date, SQN SS's senior management structure included one senior manager, one superintendent, and one security support manager. One business support representative reported directly to the SS senior manager.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of this evaluation was to identify strengths and risks that could impact SQN SS's organizational effectiveness. We assessed SQN SS (1) operations as of March 2018 and (2) culture as of the date of our interviews, which occurred March 2018 through April 2018. We did not assess compliance with nuclear security-related CFRs in this evaluation. To achieve our objective, we:

- Reviewed NPG's fiscal years (FY) 2018 through 2022 business plan, SQN FYs 2018 through 2022 business plan, and SQN SS's excellence and performance improvement plans to gain an understanding of goals, initiatives, and priorities.

- Reviewed TVA values and competencies (see the Appendix) for an understanding of cultural factors deemed important by TVA.

- Interviewed SQN SS's senior manager and three direct reports to obtain their perceptions related to strengths and risks that could affect organizational effectiveness.

- Conducted interviews with 161[8] employees, first-line supervisors, and managers and analyzed the results to identify themes related to strengths and risks that could affect organizational effectiveness.

- Reviewed performance management documentation for all managers and employees in SQN SS and analyzed the documentation for alignment with departmental and organizational goals. We also examined goals for

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[8] Seven individuals were not available for interview.

managers and employees (excluding officers) to determine whether they were specific, measurable, achievable, relevant, and time-bound (SMART).[9]

- Examined nuclear security regulatory requirements as set forth in 10 CFR 26 and 10 CFR 73 and reviewed select NPG standard department procedures, standard programs and processes (SPP), and SQN SS instructions to gain an understanding of processes.

- Reviewed operational information, including (1) overtime hours occurring in FY2015 through March 2018; (2) SQN SS condition reports (CR)[10] included in TVA's asset management system with a status date occurring in FYs 2016 through March 24, 2018; and (3) budgeted and actual spend for FYs 2015 through 2017 to gain additional understanding of risks within SQN SS.

- Assessed the overall effectiveness of SQN SS in the following areas, as included in TVA's Business Operating Model:
  - Alignment – How well the organization coordinates the activities of its many components for the purpose of achieving its long-term objectives— this is grounded in an understanding of what the organization wants to achieve, and why.
  - Engagement – How the organization achieves the highest level of performance from its employees.
  - Execution – How well the organization achieves its objectives and mission.

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

OBSERVATIONS

We identified strengths related to (1) organizational alignment, (2) teamwork, and (3) frontline management[11] support. However, we also identified risks that could impact the effectiveness of SQN SS to achieve its responsibilities in support of the Nuclear mission. These risks included (1) ineffective senior management support related to communication, accountability, behaviors, and resources; and (2) perceptions of unethical actions.

STRENGTHS

During the course of our interviews and data analyses, we identified strengths related to (1) organizational alignment, (2) teamwork, and (3) frontline management support.

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[9] According to TVA documentation, individuals are expected to create goals that contain SMART elements and align with organizational goals.

[10] CRs document the evaluation and resolution of conditions identified.

[11] Frontline management includes shift supervisors and shift managers.

Organizational Alignment

Our assessment of performance management documentation for SQN SS personnel revealed that performance goals for employees support frontline management goals, and frontline management goals support senior management goals. The goals for management were SMART, and the SQN SS priorities aligned to the Nuclear and TVA missions.

Teamwork

The majority of employees interviewed provided positive comments pertaining to teamwork within their departments or crews, with other TVA SS teams, and other SQN personnel. For example, some employees indicated they support each other, share lessons learned, and have good interactions with other plant personnel.

Frontline Management Support

Most SQN SS indicated their security shift managers and supervisors have their best interests in mind and support them. Many of these employees expressed trust in their frontline managers and supervisors. Many employees also indicated that frontline managers and supervisors communicated what they needed to know and provided feedback.

RISKS

We identified risks that could impact the effectiveness of SQN SS to achieve its responsibilities in support of the Nuclear mission. These risks included (1) ineffective senior management support due to inadequate communication, accountability concerns, management behaviors, and perceptions of insufficient resources; and (2) perceptions of unethical actions.

Ineffective Senior Management Support

Effectively executing TVA's mission not only requires organizational alignment and employee engagement, but it also requires leadership that exhibits actions and behaviors consistent with TVA policies, procedures, and expectations. TVA's leadership competencies (included in the Appendix) define expected behaviors of leadership, such as communicating effectively, taking responsibility by exhibiting ownership and being accountable for actions, and inspiring trust and engagement. While most employees indicated support from frontline management as a strength, the majority of employees indicated some SQN SS senior managers do not display behaviors in alignment with TVA expectations. Specifically, employees expressed frustrations and indicated there is low morale stemming from (1) inadequate communication, (2) accountability concerns, (3) management behaviors, and (4) perceptions of insufficient resources. This has negatively affected the culture and impeded senior management's ability to positively influence employee morale.

Inadequate Communication

TVA's leadership competency, effective communication, encourages managers to communicate honestly and effectively with individuals and groups in a manner that helps them understand the rationale behind decisions. To communicate effectively, leaders should provide periodic updates, as appropriate. Many of our conversations with frontline management and employees indicated that SQN SS senior management does not share information or provide answers to their questions. Specifically, interviews with frontline management and employees revealed perceptions that SQN SS senior management (1) is vague in their communications, (2) is dishonest in their communications, (3) does not communicate site information employees need to know, and (4) is inconsistent with communication. Some employees also stated they do not receive direct communication from senior management, and several stated that senior management does not attend shift briefings for the night crews.

Some employees indicated that senior management does not listen to concerns and actively work towards solutions. For example, employees indicated that even if they do voice concerns, limited action, if any, is taken by SQN SS senior management to address the issues, and there is no follow up or follow through for resolution.

Accountability Concerns

Many employees indicated SQN SS senior management has not adopted a culture where constructive, consistent, and fair accountability exists. Some employees indicated there was a perception of mass punishment for actions taken by a few individuals while other employees stated management shows favoritism to certain employees. Specific examples provided by employees included (1) mass punishment related to administration of the sick leave policy, which employees believe is inconsistent with others in TVA, and (2) favoritism in disciplinary measures.

- *Perceptions of Mass Punishment* – According to TVA's leave policy, TVA has the authority and responsibility to determine whether the reasons for granting sick leave are proper;[12] therefore, management may require documentation, such as a note from the employee's physician, as verification of the reasons for sick leave usage. In January 2013, Corporate Security personnel implemented a guideline to assist management with the monitoring of leave usage. The guideline states that employees will receive counseling and be placed on leave control, which is not considered discipline, after the first unapproved absence. The disciplinary process will be instituted for unapproved absences after that. According to SS senior management, expectations were clarified for their site in June 2016. These included reiterating that management has the right to ask for documentation for absences and stating that individuals will be allowed two absences before

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[12] Sick leave is granted when an employee is physically incapacitated to perform his/her job or for various other reasons, including (1) dental, optical, or medical appointments; (2) caring for family members who are ill or need medical treatment; and for (3) bereavement activities.

they are required to provide documentation. After that, documentation will be required within 15 days of the absence. If documentation is not provided, leave will be recorded as leave without pay and the disciplinary process will begin. SS senior management stated that tardiness would also result in disciplinary action.

Despite the contents of the Corporate Security and SQN policies, some employees believe the issuance of the SQN policy was mass punishment for actions taken by a few individuals. Specifically, the perception is they are now being held to strict sick leave standards because some employees have absenteeism and/or tardiness issues.

- *Perceptions of Favoritism in Disciplinary Measures* – While some individuals viewed implementation of the sick leave policy as mass punishment, some employees also believe that accountability is not consistent with the sick leave policy governing other SS departments or TVA organizations. Several employees also provided examples where individuals who did not follow policies were perceived as not being disciplined or disciplined untimely for the incidents. Some employees believe other individuals in the same situation would have been treated differently. In addition, our review of performance management documentation indicated inconsistencies between ratings and comments included on the performance document.

Management Behaviors
During our interviews, many frontline managers and employees described behaviors displayed by one senior manager that were not in alignment with some TVA leadership competencies. We discussed the specifics of these issues with the appropriate SQN SS management.

Perception of Insufficient Resources
According to TVA's leadership competencies, managers are expected to build a positive environment that motivates others to achieve and exceed organizational goals and aspirations. This includes ensuring teams and individuals have the resources they need. Many employees we interviewed indicated senior management does not provide the necessary resources to perform their jobs to the best of their ability.

Many employees indicated that staffing levels are inadequate, resulting in employees having to work overtime. A couple of employees also expressed frustration related to becoming eligible to work more overtime when they take leave as this lengthens the break between work periods. For example, if an employee took leave, he/she would be subject to work more overtime because of the break in workdays created by the leave taken as indicated by NPG-SPP-03.21, *Fatigue Rule and Work Hour Limits*. According to Financial Service's data, there were approximately 88,000 overtime hours worked by SS management and employees in FY2017 resulting in overtime expenses of approximately $3.1 million, an 18 percent increase in overtime expenses since

FY2016.[13] To determine whether staffing levels or overtime issues were affecting the performance of job responsibilities, we examined CRs and determined there was only one CR related to lack of security personnel for project support. A few individuals mentioned that SS management was in the process of trying to hire more employees.

Many employees expressed concerns about having the proper communication tools to perform their job to the best of their ability. We reviewed the language in 10 CFR 73.50, Requirements for Physical Protection of Licensed Activities, and determined requirements regarding proper communication tools are unclear. We also examined relevant CRs and other documentation and determined there was either an associated action in progress or resolution in place to address this concern.

Perception of Unethical Actions
Because integrity is one of TVA's values, employees and management are charged with conducting business according to the highest ethical standards and seeking to earn the trust of others through words and actions that are open, honest, and respectful. Ethics, in the general sense, is defined as the "moral principles that govern a person's behaviour [*sic*] or the conducting of an activity."[14] Within SQN SS, many employees described management and/or employee behaviors that conflict with the integrity value and the definition of ethics. These concerns included, but were not limited to (1) not following policies and procedures associated with security processes or the use of medical information, (2) directing others to circumvent policies and procedures, and (3) not adhering to fitness for duty requirements or expectations. This could also be a contributing factor to the lack of trust previously stated. While we did not determine the validity of each of these concerns, we determined that some of the concerns were investigated, and personnel actions were taken to address SQN SS individuals who did not follow policies and procedures. We discussed the specifics of these issues with the appropriate SQN SS management.

CONCLUSION

SQN SS plays an important role in the generation of safe, reliable, and affordable electricity. Although the organization is not directly tasked with generation responsibilities, it is responsible for the protection of SQN and its personnel by carrying out duties consistent with NRC requirements, SQN's physical security plan, and applicable security-related policies and procedures. While we identified strengths related to organizational alignment, teamwork, and frontline management support, many SQN SS employees indicated senior management is not providing adequate support.

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[13] We did not validate the information provided by Financial Services.

[14] Oxford University Press. (2018). Retrieved August 6, 2018, from https://en.oxforddictionaries.com.

Based on TVA's Business Operating Model, we evaluated the risk of three critical areas that could impact SQN's SS effectiveness:

- Alignment risk is low based on the alignment of management and employee goals, which supported the Nuclear mission. In addition, SQN SS priorities aligned to the Nuclear and TVA missions.

- Engagement risk is medium. While employees cited teamwork and support from frontline management as a strength, employees described concerns with communication, accountability, behaviors and resources that indicate ineffective senior management support. These concerns along with perceptions of unethical actions can impact the engagement of the employees in SS.

- Execution risk is rated low based on (1) limited instances of plant support deficiencies from security and (2) actions taken or in process to address concerns related to communication tools.

RECOMMENDATIONS

We recommend the Senior Manager, SQN SS:

1. Identify communication gaps and take actions as necessary to address them.

2. Address the accountability perceptions and develop an action plan to ensure consistency.

3. Address management behaviors not in alignment with leadership competencies.

4. Evaluate staffing and overtime usage to determine if it is cost-beneficial to hire additional employees and lessen the use of overtime.

5. Determine if individuals are acting unethically and take action as appropriate.

TVA Management's Comments – The Senior Manager, SQN SS, had no comments on the draft of this report.

TVA Values	
Safety	We share a professional and personal commitment to protect the safety of our employees, our contractors, our customers, and those in the communities that we serve.
Service	We are privileged to be able to make life better for the people of the Valley by creating value for our customers, employees, and other stakeholders. We do this by being a good steward of the resources that have been entrusted to us and a good neighbor in the communities in which we operate.
Integrity	We conduct our business according to the highest ethical standards and seek to earn the trust of others through words and actions that are open, honest, and respectful.
Accountability	We take personal responsibility for our actions, our decisions, and the effectiveness of our results, which must be achieved in alignment with our company values.
Collaboration	We are committed to fostering teamwork, developing effective partnerships, and valuing diversity as we work together to achieve results.

TVA Leadership Competencies

Accountability and Driving for Results

Continuous Improvement

Leveraging Diversity

Adaptability

Effective Communication

Leadership Courage

Vision, Innovation, and Strategic Execution

Business Acumen

Building Organizational Talent

Inspiring Trust and Engagement