

#### Memorandum from the Office of the Inspector General

July 7, 2021

Dustin P. Watson

REQUEST FOR MANAGEMENT DECISION – EVALUATION 2021-15802 – ORGANIZATIONAL EFFECTIVENESS – JOHN SEVIER COMBINED CYCLE PLANT

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 A. Rebecca 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.

aid P. Whale

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

#### ARM:FAJ

Attachment cc (Attachment): TVA Board of Directors David L. Bowling, Jr. Susan E. Collins Megan T. Flynn David B. Fountain Amanda D. Johns T. Daniel Lunsford Jeffrey J. Lyash Jill M. Matthews

Alex D.Mosley Donald Moul Ronald R. Sanders II Michael D. Skaggs Lawrence Sparks Wilson Taylor III Kay W. Whittenburg Jacinda B. Woodward OIG File No. 2021-15802



Office of the Inspector General

**Evaluation** Report

To the Plant Manager, John Sevier Combined Cycle Plant

# ORGANIZATIONAL EFFECTIVENESS – JOHN SEVIER COMBINED CYCLE PLANT

<u>Auditor</u> A. Rebecca McCarter Evaluation 2021-15802 July 7, 2021

## ABBREVIATIONS

FY	Fiscal Year
JSCC	John Sevier Combined Cycle
PO	Power Operations
SHRM	Society for Human Resource Management
TVA	Tennessee Valley Authority

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Evaluation 2021-15802 – Organizational Effectiveness – John Sevier Combined Cycle Plant

## **EXECUTIVE SUMMARY**

#### 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. Due to the importance of alignment, team engagement, and operational performance, the Office of the Inspector General is conducting organizational effectiveness evaluations of business units across the Tennessee Valley Authority (TVA). This evaluation focuses on John Sevier Combined Cycle (JSCC) Plant, which is an organization within TVA's Power Operations organization.

JSCC, one of TVA's eight combined cycle plants, is located beside the Holston River near Rogersville, Tennessee. JSCC began commercial operation in 2012. JSCC is comprised of three combustion turbines, one steam turbine, and has a summer capacity of 871 megawatts. The objective of this evaluation was to identify factors that could impact JSCC's organizational effectiveness. Specifically, we identified behavioral and operational factors that affect organizational effectiveness.

#### What the OIG Found

During the course of our evaluation, we identified behaviors that had a positive impact on JSCC. These included positive relationships between team members and management; however, we also identified minimal behavioral risks associated with communication and accountability. In addition, we identified minimal risks to operations that, if unaddressed, could hinder JSCC's effectiveness. These were related to resource needs, such as problems obtaining parts and materials needed to perform jobs, as well as a desire for additional training, including instrument mechanic and instrumentation training. Based on our observations, we assessed JSCC's level of risk related to behaviors and operations and determined risk was low. Ratings are reflected in the table below:

	Low Risk	Medium Risk	High Risk
Behaviors	x		
Operations	x		

#### What the OIG Recommends

We recommend the JSCC Plant Manager address the (1) communication and accountability concerns and (2) resource-related risks pertaining to parts and materials as well as training needed.



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

TVA management agreed with the recommendations. See Appendix B for TVA management's complete response.

## BACKGROUND

Organizational effectiveness, as defined in this evaluation, is the ability of an organization to achieve its mission and goals. Due to the importance of alignment, team engagement, and operational performance, the Office of the Inspector General is conducting organizational effectiveness evaluations of business units across the Tennessee Valley Authority (TVA). This evaluation focuses on John Sevier Combined Cycle (JSCC) Plant, which is an organization within TVA's Power Operations (PO).

JSCC, one of TVA's eight combined cycle plants, is located beside the Holston River near Rogersville, Tennessee. JSCC began commercial operation in 2012. JSCC is comprised of three combustion turbines, one steam turbine, and has a summer capacity of 871 megawatts.

JSCC's initiatives as of January 2021 included (1) providing weekly communication updates for site personnel, (2) ensuring contractors understand the clearance process and utilize nonsite personnel clearance check sheets,<sup>1</sup> (3) ensuring block training is scheduled for all site personnel, and (4) participating in community involvement. Metrics for fiscal year (FY) 2021 included, but were not limited to, total spend, recordable injuries, good catches, trip events, and total continuous improvement savings.

As of February 28, 2021, JSCC was under budget in their spending. Staffing has remained relatively steady since FY 2018, at around 25 employees. As of February 17, 2021, JSCC consisted of 25 individuals, including the Plant Manager, Maintenance Manager, 2 maintenance coordinators, 14 combined cycle operations technicians, 4 combined cycle lead operations technicians, 2 maintenance mechanics, and 1 business support representative.

## **OBJECTIVE, SCOPE, AND METHODOLOGY**

The objective of this evaluation was to identify factors that could impact JSCC's organizational effectiveness. We assessed operations as of February 2021 and culture at the time of our interviews, which occurred during March 15, 2021, through April 2, 2021. To complete the evaluation, we:

• Reviewed (1) TVA's FY 2021 through FY 2025 business plan, (2) PO's FY 2021 through FY 2023 business plan, (3) Gas Operations' FY 2021 through FY 2023 business plan, and (4) documentation provided by JSCC to gain an understanding of initiatives, metrics, and/or risks within JSCC.

<sup>&</sup>lt;sup>1</sup> Clearance procedures establish standardized requirements to ensure equipment is isolated from energy sources and rendered nonoperative before performing work where unexpected energizing, start up, or release of stored energy could occur and cause injury or property damage. Per JSCC management, nonsite personnel clearance check sheets were developed by Gas Operations to guide nonsite/non-TVA employees to ask the right questions and reduce clearance issues.

- Reviewed TVA values and competencies (see Appendix A), for an understanding of cultural factors deemed important to TVA.
- Reviewed select TVA and PO Standard Programs and Processes and other documentation to gain an understanding of processes.
- Examined FY 2019 through February 28, 2021, financial information to gain an understanding of expenditures used in support of the work environment.
- Examined FY 2018 through February 17, 2021, staffing data to gain an understanding of headcount changes and overtime hours worked.
- Conducted individual interviews with 24<sup>2</sup> individuals, including management, and analyzed the results to identify themes that could affect organizational effectiveness.

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**

During the course of our evaluation, we identified behaviors that had a positive impact on JSCC. These included positive relationships between team members and management; however, we also identified minimal behavioral risks associated with communication and accountability. In addition, we identified minimal risks to operations that, if unaddressed, could hinder JSCC's effectiveness. These were related to resource needs, such as problems obtaining parts and materials needed to perform jobs as well as a desire for additional training, including instrument mechanic and instrumentation training.

## **BEHAVIORAL FACTORS**

According to the Society for Human Resource Management (SHRM),<sup>3</sup> employee engagement relates to the level of an employee's connection and commitment to the organization. SHRM also specifies drivers of employee engagement, including commitment of leaders, trust in leadership, and positive relationships with supervisors. TVA has developed competencies intended to define common characteristics that set the tone for how work is to be performed in the organization. Defined behaviors are associated with the competencies to provide guidance as to how employees can demonstrate their commitment to TVA values. Based on interviews with individuals within JSCC, we determined behavior-related risk was low.

#### **Positive Relationships With Team Members**

TVA expects employees to earn the trust of others through open, honest, and respectful words and actions and to conduct business in accordance with ethical standards. All JSCC employees interviewed commented positively on

<sup>&</sup>lt;sup>2</sup> One employee declined to be interviewed.

<sup>&</sup>lt;sup>3</sup> SHRM is a membership organization for Human Resource professionals.

interactions with others in their group and most individuals indicated they trusted their coworkers to perform their jobs well. Several individuals specifically commented on the team working well together or indicated they get along with each other. When asked about ethics, all employees commented positively on the ethical culture<sup>4</sup> in the organization. In addition, most individuals commented positively on morale, with several individuals specifically attributing morale to positive team interactions or working well together.

#### **Relationships With Management**

TVA expects leaders to inspire trust and engagement by building a positive environment that motivates others to achieve and exceed organization goals and team aspirations. We asked individuals at JSCC about relationships with their first-line management, middle management, and upper management. Responses from individuals indicated that leadership is a positive driver of engagement within JSCC.

The majority of individuals commented positively when asked about interactions with first-line and middle management. Examples of positive interactions included having a good relationship with management, being supported by management and/or the belief that management is knowledgeable or does a good job. Most individuals interviewed indicated they trusted their first-line and middle management and the majority felt comfortable reporting concerns or offering a differing opinion. Many individuals also commented positively on recognition from first-line and middle management. Examples of recognition included verbal praise and praise through emails, gifts, or "High 5's."<sup>5</sup> In addition, some individuals described management support or the working relationship with management as being a driver of positive morale.

Upper management for all individuals was outside of JSCC; therefore, not all individuals commented on relationships with upper management. Of those who commented, comments were positive related to communication, trust, comfort reporting concerns and/or offering a differing opinion, and recognition. In 2020, JSCC was recognized as having outstanding performance in the areas of personnel safety, cost, availability, and reliability and received a Guidehouse<sup>6</sup> runner-up award for their accomplishments. Several individuals indicated upper management recognized the plant for their performance.

While the majority of individuals commented positively on relationships with first-line and middle management, several individuals indicated communication and accountability could be improved. For example, some individuals at JSCC expressed concerns related to (1) communication issues due to rotating shifts, (2) communication gaps due to teleworking, or (3) a general feeling of being out of the loop. In addition, when asked about accountability, some employees

<sup>&</sup>lt;sup>4</sup> Ethical culture, as defined in this evaluation, refers to the shared concept of right and wrong behavior in the workplace.

<sup>&</sup>lt;sup>5</sup> High 5 is an employee recognition program in Power Operations.

<sup>&</sup>lt;sup>6</sup> Guidehouse Generation Knowledge Service Fossil Committee is the primary peer group TVA uses for coal and gas plant benchmarking.

expressed their perception that management does not enforce accountability fairly or consistently among employees.

#### MINIMAL RISKS TO OPERATIONS

Based on our interviews, we identified minimal risks to operations that, if unaddressed, could hinder JSCC's effectiveness. Feedback pertaining to relationships with others within and outside of JSCC was primarily positive and several individuals indicated having no concerns with completing their primary job responsibilities. However, several individuals expressed concerns related to resource needs, such as not having parts or materials needed to perform jobs as well as training. Examples of concerns included (1) not having the right parts on hand; (2) the lag time for getting materials ordered, especially larger items; (3) limited on-site inventory; or (4) tools or parts being hard to find. In addition, a few employees indicated a desire for additional training, such as instrument mechanic or instrumentation training.

## **RECOMMENDATIONS**

We recommend the JSCC Plant Manager address:

1. Concerns related to communication and accountability.

**TVA Management's Comments** – Gas Operations' management agreed with the recommendation. See Appendix B for TVA management's complete response.

2. Resource-related risks pertaining to parts and materials needed to perform jobs as well as training.

**TVA Management's Comments** – Gas Operations' management agreed with the recommendation. See Appendix B for TVA management's complete response.

TVA Values		
Safety	We are committed to the safety and well-being of each TVA employee and the communities we serve.	
Service	We are proud to serve in the communities in which we live, work, and play.	
Integrity	We are honest and straightforward.	
Inclusion	We strive to treat everyone with dignity and respect by welcoming each person's individuality so we can all reach our full potential.	

## **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 June 11, 2021

David P. Wheeler, WT 2C-K

REQUEST FOR COMMENTS – DRAFT EVALUATION 2021-15802 – ORGANIZATIONAL EFFECTIVENESS - JOHN SEVIER COMBINED CYCLE PLANT

This is in response to your memorandum dated June 3, 2021. After review of the draft evaluation, please see the following response for organizational effectiveness.

We would like to thank Andi R. McCarter for her diligence and support to optimize the Gas Operations workforce by identifying opportunities for organizational effectiveness.

#### Recommendations

We recommend the JSCC Plant Manager address:

1. Concerns related to communications and accountability.

Response Gas Operations agrees with this recommendation.

2. Resource-related risk pertaining to parts and materials needed to perform jobs as well as training.

Response Gas Operations agrees with this recommendation.

Thank you for allowing us to provide these comments. Please contact us if you have any questions.

Dustin P. Watson Plant Manager John Sevier Combined Cycle Plant

DPW:TDL cc: David L. Bowling Jr Susan E. Collins Megan T. Flynn David Fountain Amanda D. Johns