



Memorandum from the Office of the Inspector General

December 16, 2020

Christopher W. Hansen

REQUEST FOR FINAL ACTION – EVALUATION 2020-15762-02 – ORGANIZATIONAL EFFECTIVENESS – COMMERCIAL ENERGY SOLUTIONS ORIGINATION AND RENEWABLES

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 Amy R. Rush, Evaluations Manager, at (865) 633-7361 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.

A handwritten signature in black ink that reads "David P. Wheeler".

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

JLM:KDS

Attachment

cc (Attachment):

TVA Board of Directors
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OIG File No. 2020-15762-02



Office of the Inspector General

Evaluation Report

To the Vice President,
Origination and
Renewables

ORGANIZATIONAL EFFECTIVENESS – COMMERCIAL ENERGY SOLUTIONS ORIGINATION AND RENEWABLES

Auditor
Amy R. Rush

Evaluation 2020-15762-02
December 16, 2020

ABBREVIATIONS

FY	Fiscal Year
LPC	Local Power Company
O&R	Origination and Renewables
PPA	Purchase Power Agreement
SHRM	Society for Human Resource Management
TVA	Tennessee Valley Authority

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Evaluation 2020-15762-02 – Organizational Effectiveness – Commercial Energy Solutions Origination and Renewables

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 between strategy, 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 Commercial Energy Solutions Origination and Renewables (O&R), which is an organization within TVA's Financial Services.

O&R is tasked with developing a utility scale solar portfolio, leading the renewable energy efforts for TVA, and advancing toward its vision of attracting, retaining, and growing business and industry, which includes meeting system and customer needs through negotiation and comprehensive management of renewable, purchased power, fiber, and new commercial solutions. The objective of this evaluation was to identify factors that could impact O&R'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 O&R. These included interactions with team members and leadership. While O&R met targets for a majority of their metrics and furthered initiatives within the organization, we also identified risks to business operations and achievement of future O&R initiatives. These included educational needs, such as the need for training and the lack of documented processes and procedures, technology needs, and insufficient staffing for the future within and outside O&R. In addition, business partners discussed areas for improvement, including collaboration and O&R strategy. Ratings are reflected in the table below:

	Low Risk	Medium Risk	High Risk
Behaviors	X		
Operations		X	



Evaluation 2020-15762-02 – Organizational Effectiveness – Commercial Energy Solutions Origination and Renewables

EXECUTIVE SUMMARY

What the OIG Recommends

We recommend the Vice President, O&R, address (1) training needs and lacking processes and procedures, (2) technology concerns, (3) staffing concerns within O&R and identification of business partner needs based on increased O&R workload, and (4) business partner concerns related to collaboration and O&R strategy improvements.

TVA Management's Comments

TVA management described actions taken and planned to address our recommendations. See Appendix B for TVA management's complete response.

Auditor's Response

We agree with management's planned actions and actions taken.

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 between strategy, 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 Commercial Energy Solutions Origination and Renewables (O&R).

O&R is an organization within Financial Services' Commercial Energy Solutions, a strategic business unit whose focus is on provision of lower cost and reliable power and delivery of energy solutions to promote economic development. O&R is tasked with developing a utility scale solar portfolio,¹ leading the renewable energy efforts for TVA, and advancing toward O&R's vision of attracting, retaining, and growing business and industry. These efforts include meeting system and customer needs through negotiation and comprehensive management of renewable, purchased power, fiber, and new commercial solutions. Responsibilities are implemented through three departments,² which comprise O&R.

- Business Development and Origination is responsible for new purchase power agreements (PPA) for traditional and renewable assets. Responsibilities of the department also include the purchase and sale of generation assets, leadership of business development, and coordination of renewable product development. This includes researching emerging market and industry trends. Other functions within the group involve developing new business models to address strategic risk and developing business cases to leverage market opportunities. Business Development and Origination personnel are also responsible for managing the leasing of TVA's surplus fiber.³
- Contract and Product Management functions include management of existing PPAs, the commercial transmission process, and product and/or program management. Programs include Green Flex[®], which allows businesses and industries inside the Tennessee Valley to purchase out-of-Valley renewable energy credits⁴ and Green Switch[®], which helps residential, business, and industrial customers support renewable generation within the Valley. Contract and Product Management also manages the dispersed power production

¹ A utility scale solar portfolio is a group of facilities that generate solar power and supply the power to the grid.

² During our evaluation, on September 14, 2020, organizational changes, including changes in staffing, occurred within O&R and department names were revised to Origination & Utility Scale Solar, Distributed Energy Solutions, and Business Development & Strategy. Our evaluation covers the departments that were in place during the beginning of our interviews, which began September 8, 2020.

³ TVA owns and operates a fiber network for connecting operational assets.

⁴ Renewable energy credits represent the property rights to the environmental, social, and other nonpower attributes of renewable electricity generation. The credits are issued when one megawatt-hour of electricity is generated and delivered to the electricity grid from a renewable energy resource.

- program that allows residential, business, and industrial customers to sell power from qualified facilities to TVA.
- Renewable Energy Solutions is responsible for renewable marketing, market research, and serving as renewable product ambassadors. These activities, according to Renewable Energy Solutions personnel, include working with local power companies and directly-served customers with regard to their sustainability and renewable goals.

O&R's fiscal year (FY) 2020 initiatives included implementation of long-term partnership agreements that address the August 2019 TVA Board resolution to extend the length of wholesale power contracts with the local power companies (LPCs) to 20 years. Additional initiatives included development of a solar strategy, execution of renewable requests for proposals,⁵ and implementation of solar PPAs. These initiatives address TVA's 2019 integrated resource plan⁶ recommendation related to the addition of between 1,800 and 8,000 megawatts of solar by 2028. Other initiatives included implementation of an Energy Trading and Risk Management system, a renewable energy credits strategy and a flexibility research project, which is a two-year pilot project that allows LPCs to address behind-the-meter⁷ opportunities. Metrics for FY 2020 included, but were not limited to, commercially secured load in megawatts, negotiated savings, contract value added, supplier performance margin, and program adoption by LPCs.

In FY 2018 and FY 2019, O&R has been under budget in their spending and staffing has increased from 19 to 34 employees, with employees being in their current departments on average a little over one year and in their current positions an average of almost one and a half years. As of August 10, 2020, O&R consisted of 34 individuals, including the Vice President, 5 individuals in Business Development and Origination, 18 individuals in Contract and Product Management, 6 individuals in Renewable Energy Solutions, and 4 individuals reporting to the Vice President.

⁵ The renewable requests for proposals are for unique projects that will provide approximately 2 to 200 megawatts of power to the TVA system.

⁶ TVA's integrated resource plan is a long-term plan that provides direction on how TVA can best meet future demand for power.

⁷ Behind-the meter is energy provided directly to a home or business without going through an electric meter and interacting with an electric grid.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of this evaluation was to identify factors that could impact O&R's organizational effectiveness. We assessed operations as of FY 2020 and culture at the time of our interviews and fieldwork, which occurred during September 8, 2020, through September 21, 2020. To complete the evaluation, we:

- Reviewed (1) Financial Services FY 2020 through FY 2022 business plan and (2) documentation provided by O&R to gain an understanding of initiatives, metrics, and/or risks within O&R.
- Reviewed TVA values and competencies, as of September 2020 (see Appendix A), for an understanding of cultural factors deemed important to TVA.
- Reviewed select TVA Standard Programs and Processes and other documentation to gain an understanding of processes.
- Examined FY 2017 through July 2020 financial information to gain an understanding of expenditures used in support of the work environment.
- Conducted individual interviews with 33⁸ individuals, including management, and analyzed the results to identify themes that could affect organizational effectiveness.
- Interviewed a nonstatistical sample of 87 individuals from other TVA organizations that work with O&R personnel and analyzed results to identify factors affecting organizational effectiveness from a business partner perspective.
- Assessed the overall effectiveness of O&R in behavioral and operational aspects as described in TVA's Business Operating Model.

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

Prior to our evaluation, TVA personnel experienced a disruption to their normal business operations, which could have negatively impacted engagement within O&R. As of March 25, 2020, TVA employees who were not required to be physically at their site to support plant operation or plant outages, which included O&R, were subject to mandatory telework as part of TVA's response to the COVID-19 pandemic. During the course of our evaluation, we identified behaviors that had a positive impact on O&R. These included interactions with team members and leadership. While O&R met targets for a majority of their metrics and furthered initiatives within the organization, we also identified risks to business operations and achievement of O&R initiatives, including educational

⁸ One individual left the organization prior to the start of interviews.

needs, such as the need for training and the lack of documented processes and procedures, technology needs, and insufficient staffing for the future within and outside O&R. In addition, business partners discussed areas for improvement, including collaboration and O&R strategy.

Positive Behaviors for Engagement

According to the Society for Human Resource Management (SHRM),⁹ 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. Despite the disruption to normal business operations, we determined, based on interviews with O&R personnel, behavioral risk was low due to positive interactions within the team and with leadership.

Team Interactions are Positive Drivers of Engagement

Most individuals commented positively on interactions within their group and all trusted their coworkers to perform their jobs well. Specific examples provided by those commenting positively indicated that communication, such as provision of feedback, collaboration, and/or a willingness to help each other existed within the group. Additionally, when asked what worked well within their organization, several employees indicated that it was communication, collaboration, and/or teamwork. Most individuals within O&R also described morale as being positive, and several individuals specifically commented on team members being welcoming or supportive as one of the drivers behind the positive morale. A couple of individuals also mentioned the passion or energy in the group.

Leadership is a Positive Driver of Engagement

TVA expects leaders to inspire trust and engagement by building a positive environment that motivates others to achieve and exceed organizational goals and aspirations. We asked individuals within O&R about relationships with their first-line leadership, middle management, and upper management. Responses from individuals indicate leadership is a positive driver of engagement in O&R.

First-Line Leadership

Most individuals commented positively when asked about relationships and communication with their first-line management. Many individuals provided examples of positive interactions with first-line management. Examples included management focus on employee development, supportiveness, and exhibition of care and concern. All individuals indicated they trusted their first-line management and most stated they felt comfortable reporting concerns or offering a differing opinion. In addition, many individuals commented favorably on first-line management with regard to accountability and in relation to rewards and recognition. Examples of recognition from management included verbal recognition, recognition through email, outstanding performance awards, and

⁹ SHRM is a membership organization for Human Resource professionals.

provision of opportunities, such as participation in projects outside of normal job duties.

Middle and Upper Management

Many individuals indicated positive relationships and communication with middle management. Most individuals also indicated they trusted their middle management and most indicated they felt comfortable reporting concerns or offering a differing opinion. Most provided positive comments in relation to accountability with middle management. Many individuals also commented favorably on recognition from middle management and some provided examples of recognition that included outstanding performance awards and handwritten notes or verbal praise.

Upper management for several employees was outside of the O&R organization. Of the ones who commented on upper management within O&R, some commented favorably on their relationship and communication with upper management. Many individuals also commented positively on trust, including reporting concerns and offering a differing opinion from upper management. Several employees provided positive feedback in relation to accountability and some commented positively on recognition from upper management. A few individuals provided examples of recognition from upper management, which included gift bags and/or handwritten notes or verbal recognition.

As stated previously, most individuals within O&R described morale as being positive. Some individuals specifically commented on management and/or management's actions being a driver behind the positive morale. Examples included management being a role model for the team and positive interactions with management during meetings.

RISKS TO OPERATIONS

Based on our interviews, we identified risks to operations that could impede O&R's effectiveness if unaddressed. While O&R met targets for a majority of their metrics and furthered initiatives within the organization, individuals expressed concerns related to business operations and achievement of future initiatives. These concerns included educational needs, such as the need for training and the lack of documented processes and procedures, technology needs, and insufficient staffing for the future within and outside O&R. In addition, business partners discussed areas for improvement, including collaboration and O&R strategy.

Risks to Business Operations and Achievement of O&R Initiatives

As stated previously, O&R personnel experienced a disruption to their normal business operations and were subject to mandatory telework. When asked how telework affected their job responsibilities, several individuals commented on an increase in productivity, positives related to communication and collaboration, and/or the flexibility or autonomy that telework provides. As of August 2020, O&R met the targets for the majority of their metrics. In addition, 142 out of

154 LPCs had executed the long-term partnership agreement and 61 had executed the flexibility agreement. O&R personnel had also reviewed and reduced the list of renewable requests for proposal and indicated they were on track for executing agreements in the fall of 2020.

While several individuals stated they had no concerns with completing their primary job responsibilities and indicated they had what they needed to perform their job duties, several individuals indicated concerns in relation to areas that impeded their ability to complete their job responsibilities or performance of job duties. Specifically, these concerns were related to educational needs, technology concerns or needs, and/or staffing concerns. Several employees commented on the need for training or the lack of documentation and processes within areas, such as contract and product management. In addition, a couple indicated they did not have enough information to be empowered or that processes were lacking, which impeded empowerment. As indicated previously, we noted that many individuals were new to their positions and to their departments, which highlights the importance of documented processes and procedures. Furthermore, the telework mandate might have further highlighted these concerns, as on-the-job training might have been limited because of telework.

Several individuals also indicated technology concerns or needs in relation to what they needed to perform their job duties. Examples included issues with obtaining support from Information Technology, which is currently going through a reorganization. Other examples included the need for a customer relationship platform and a repository to store contract information. O&R is currently in the process of selecting a vendor for an Energy Trading and Risk Management system, which is a centralized repository for transaction data.

Other concerns indicated by several O&R personnel included staffing concerns. Several individuals discussed the need for additional staffing within their organization and/or within their business partners' organizations.¹⁰ This is in light of the solar PPA implementation efforts and the solar strategy initiative, which includes plans for solar expansion. According to an organizational announcement reflecting changes as of September 14, 2020, there are plans to fill management and key positions within the organization. The organizational announcement indicated the creation of a team that will coordinate solar activities across the agency and ensure the proper integration of solar contracts into the TVA power system. O&R documentation also indicated that O&R was working towards alignment of the solar strategy direction with the commercial strategy and across TVA. Additionally, during our interviews, we noted minimal staffing focused on business development, which is part of O&R's vision. We noted the organizational announcement included plans for a team who will focus on business case development and new product and service governance, among other things.

¹⁰ Increasing the number of PPAs will increase the amount of work for other organizations, such as Transmission & Power Supply and Environment.

Business Partner Collaboration Risk and Perceived Strategy Improvements

Because multiple organizations are necessary to meet TVA system and customer needs effectively, it is essential that O&R and its business partners have positive working relationships. Therefore, we interviewed a sample of O&R business partners to determine their opinions related to O&R products and services, quality of feedback and communication, and timeliness. The majority of individuals provided feedback indicating that O&R was above average in all areas. However, many had suggested improvements for O&R.

Several individuals indicated the need for timelier communication or collaboration with O&R. Examples indicated the need for O&R to collaborate with others so that business partners can ensure they are in alignment with O&R or so business partners can ensure timeliness on their end. Furthermore, a few individuals noted that O&R could improve with setting realistic expectations, with a few indicating feeling rushed to provide information to O&R. While many individuals within O&R indicated having positive relationships with their business partners, a few individuals also indicated the need for improvements in interactions with business partners, such as responsiveness, from their end.

Several business partners indicated the need for improvement in O&R strategy or processes. Specifically, examples included the need for (1) a comprehensive or coherent strategy related to solar or products and programs, (2) expansion in capabilities due to changes in the market, and (3) more structured processes and/or changes to processes to address customer needs effectively. As stated previously, O&R's FY 2020 initiatives included development of a solar strategy, execution of a renewable energy credits strategy, and implementation of solar PPAs.

CONCLUSION

O&R plays a vital role in the purchase and sale of generation assets, coordination of business development, management of the commercial transmission process, and management of the product programs for customers, as well as leading TVA's renewable energy efforts. According to the U.S. Energy Information Administration, renewables is the fastest growing source of electricity generation through 2050 with continuous decline in capital costs associated with renewable energy. The accelerated growth in renewables and the integrated resource plan recommendation related to adding between 1,800 and 8,000 megawatts of solar energy by 2028 indicates the importance of the O&R organization and its ability to collaborate effectively with other TVA organizations to address TVA system and customer needs.

O&R personnel indicated positive relationships with each other and with O&R leadership, which indicates employees' connection and commitment to the organization. While O&R experienced some operational successes in FY 2020, concerns were expressed in relation to business operations and achievements of initiatives. Addressing concerns related to educational and technological needs can position the organization to meet its responsibilities more efficiently.

Furthermore, addressing staffing concerns, including those within the business development area, and business partner concerns related to collaboration and O&R strategy and processes will enhance the success of TVA in meeting system and customer needs, including those related to renewables.

RECOMMENDATIONS

We recommend the Vice President, O&R:

1. Identify training needs and document the processes and procedures that assist with completion of job responsibilities.

TVA Management's Comments – O&R will survey all employees to identify gaps in training, processes, and procedures. Plans to resolve identified gaps will be documented by the end of the third quarter of FY 2021.

Auditor's Response – We agree with management's planned actions.

2. Continue implementation of the Energy Trading and Risk Management system and address other technology concerns.

TVA Management's Comments – O&R will continue to work with partner organizations to identify and implement an appropriate Energy Trading and Risk Management system and associated technology opportunities.

Auditor's Response – We agree with management's planned actions.

3. Determine adequacy of staffing needs within O&R and address any deficiencies in staffing that impede meeting TVA system needs or renewable energy goals and work with business partners to identify needs based on increased O&R workload.

TVA Management's Comments – O&R has completed hiring for two key positions and is in the process of hiring for three additional positions. Additional O&R and partner organization resource requirements will be identified through a strategic assessment which will be completed by the fourth quarter of FY 2021.

Auditor's Response – We agree with management's actions planned and taken.

4. Address business partner concerns related to collaboration and O&R strategy improvements.

TVA Management's Comments – O&R is leading a collaborative assessment of strategic renewable initiatives with business partners which will be completed in the fourth quarter of FY 2021.

Auditor's Response – We agree with management's planned actions.

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

December 15, 2020

David P. Wheeler
Assistant Inspector General, Audits and Evaluations

RESPONSE TO REQUEST FOR COMMENTS – DRAFT EVALUATION 2020-15762-02 – ORGANIZATIONAL EFFECTIVENESS - COMMERCIAL ENERGY SOLUTIONS ORIGINATION AND RENEWABLES

This is in response to the recommendations provided in your recent draft evaluation of organizational effectiveness with TVA's Origination & Renewables (O&R) business unit.

O&R management appreciates the efforts put forth by Lisa Hammer, Amy Rush, and the audit team to conduct this evaluation. Our organizational effectiveness is of the upmost importance. We are pleased to hear that personnel have positive relationships with each other and O&R leadership, indicating a connection and commitment to the organization. We also agree with the four recommendations to improve operational effectiveness. In particular:

Recommendation 1. Identify training needs and document the processes and procedures that assist with completion of job responsibilities.

O&R Response: O&R will survey all O&R employees to identify gaps in training, processes, and procedures. Plans to resolve identified gaps will be documented by the end of Q3FY21.

Recommendation 2. Continue implementation of the Energy Trading and Risk Management system and address other technology concerns.

O&R Response: O&R will continue to work with partner organizations to identify and implement an appropriate Energy Trading and Risk Management (ETRM) system and associated technology opportunities.

Recommendation 3. Determine the adequacy of staffing needs within O&R and address any deficiencies in staffing that impede meeting TVA system needs or renewable energy goals and work with business partners to identify needs based on increased O&R workload.

O&R Response: O&R has completed the hiring of two key positions and is in the process of hiring three additional positions. Additional O&R and partner organization resource requirements will be identified through a strategic assessment which will be completed by Q4FY21.

Recommendation 4. Address business partner concerns related to collaboration and O&R strategy improvements.

O&R Response: O&R is leading a collaborative assessment of strategic renewable initiatives with business partners, which will be completed Q4FY21.

David P. Wheeler
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December 15, 2020

Thank you for the opportunity to review and respond. Please let me know if you have any further questions.



Christopher W. Hansen
Vice President
Origination & Renewables

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