

# Oral Defense Announcement

University of Missouri – St. Louis Graduate School

An oral examination in defense of the dissertation for the degree  
Doctor of Business Administration with an emphasis in Leadership

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Master of Business Administration, University of Colorado, 2012  
Bachelor of Science, Civil Engineering, University of Missouri-Columbia, 2008

## **Radiating Excellence: Leadership Styles in Nuclear Power That Influence Operators Towards Industry Best Practices**

Date: August 3, 2024

Time: 8:00 a.m. to 10:00 a.m.

Place: Remote

### **Abstract**

Poor leadership is the root cause for the three most significant accidents in the nuclear industry. The purpose of this research was to determine the best leadership characteristics of operating supervisors at nuclear plants that could help prevent future accidents from happening. Operating supervisors are the leaders that have the greatest impact on how safe the nuclear plant is operating. A mixed method approach was used, where the quantitative study surveyed 77 supervisors about their leadership style and how well they influence standards adherence, and the qualitative study interviewed 11 subordinates of supervisors to determine how supervision helps them follow the standards. The results show that empowering leadership and ethical leadership are both important leadership styles for promoting standards adherence at nuclear facilities. However, ethical leadership does not significantly moderate the relationship between empowering leadership and standards adherence. Understanding how empowering leadership and ethical leadership influence performance is important to senior leaders at nuclear stations and could guide their decisions when hiring supervisors and developing supervisor training programs. Understanding leadership within the nuclear industry could also improve station performance and help build public trust in nuclear power.

### **Defense of Dissertation Committee**

Matthew Taylor, PhD

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