Staying on Top

Advancing a Culture of Continuous Improvement
TABLE OF CONTENTS

Preface ........................................................................................................................................................................................... 1
Acknowledgments .................................................................................................................................................................... 2
1. Introduction ....................................................................................................................................................................... 3
2. Belief ..................................................................................................................................................................................... 4
3. Values................................................................................................................................................................................... 5
   A. Setting Long-Term Direction........................................................................................................................................ 5
   B. Leadership and Talent Development ..................................................................................................................... 6
   C. Excellence Standards ............................................................................................................................................ 7
   D. Continuous Learning............................................................................................................................................. 8
   E. Self-Awareness and Self-Correction ....................................................................................................................... 9

GENERAL DISTRIBUTION: Copyright © 2019 by the Institute of Nuclear Power Operations. Not for sale or for commercial use. This document may be used or reproduced by INPO members. Not for public distribution, delivery to, or reproduction by any third party without the prior agreement of INPO. All other rights reserved.

NOTICE: This information was prepared in connection with work sponsored by the Institute of Nuclear Power Operations (INPO). Neither INPO, INPO members, INPO participants, nor any person acting on behalf of them (a) makes any warranty or representation, expressed or implied, with respect to the accuracy, completeness or usefulness of the information contained in this document or that the use of any information, apparatus, method, or process disclosed in this document may not infringe on privately owned rights or (b) assumes any liabilities with respect to the use of, or for damages resulting from the use of, any information, apparatus, method or process disclosed in this document.
Preface

*Staying on Top* provides a set of values and behaviors for establishing a culture that achieves sustainable results and enables continuous performance improvement.

“Culture” can be defined as the set of shared beliefs, values and behaviors that characterize an institution or organization. This document highlights the specific characteristics inherent in the cultures of long-standing, high-performing organizations.

This document applies to personnel at all nuclear stations, regardless of their performance levels. If the station has already achieved high performance, then maintenance of the culture described herein will enable the organization to remain at high levels while focusing on continuous improvement. If, on the other hand, the station is low performing, then by strengthening these cultural elements, the organization’s incremental performance gains will be sustained throughout its recovery, and eventual attainment of high performance will be assured.

In this document, the following terms apply:

- A “belief” is something that is accepted, considered true, or held as an opinion.
- A “value” or set of values are ideas that are deemed important and that stem from beliefs.
- A “behavior” is the way in which someone conducts oneself.

It is not necessary that the wording used to describe specific beliefs and values in this document be duplicated verbatim in site- or company-specific documents; however, concepts should be evident in the behaviors and outcomes of the organization. In particular, organizations should develop methods to observe and measure the behaviors described in this document.

This document is for use by corporate and station leaders to improve their understanding of and to reinforce the beliefs, values and associated behaviors needed to achieve and sustain high levels of station performance. In addition, leaders of other organizations, such as corporate and supplier organizations, may also find aspects of this document applicable.
Acknowledgments

The following individuals developed, reviewed, and provided key input into this document:

Ed Burchfield  
Site Vice President  
Oconee Nuclear Station

Bob Carritte  
Principal Officer  
MPR Associates

Ken Christian  
Director, Plant Evaluations  
Institute of Nuclear Power Operations

Cindy Connelly  
Manager, Industry Leadership and Performance Improvement  
Institute of Nuclear Power Operations

Kenzie Freeman  
Senior Communications Specialist  
Institute of Nuclear Power Operations

Joel Gebbie  
Chief Nuclear Officer and Senior Vice President  
Indiana Michigan Power Company

Matt Herr  
Plant Manager  
Peach Bottom Atomic Power Station

Todd Horton  
Vice President, Site Operations  
Palo Verde Generating Station

Chris King  
Director, Communications  
Institute of Nuclear Power Operations

Megan Lemke  
Manager, NANTeL  
Institute of Nuclear Power Operations

Susan Landahl  
Senior Vice President, Organizational Effectiveness  
Exelon Corporation

Ray Lieb  
Senior Vice President, Fleet Engineering  
First Energy Nuclear Operating Company

Tammy Love  
Vice President, Plant Operations and Technical Support  
Institute of Nuclear Power Operations

George Manaskie  
Director, Industry Training and Proficiency  
Institute of Nuclear Power Operations

Mano Nazar  
President and Chief Nuclear Officer, Nuclear Division  
NextEra Energy, Inc.

Phil Russell  
Director, Plant Operations  
Institute of Nuclear Power Operations

Pete Sena  
President and Chief Nuclear Officer  
PSEG Nuclear, LLC

Rusty Shoemaker  
Director, Performance Monitoring  
Institute of Nuclear Power Operations

Roger Spinnato  
Director, Industry Leadership  
Institute of Nuclear Power Operations

Paul Steiner  
Team Leader  
Institute of Nuclear Power Operations

Debbie Williams  
Director, Industry Learning  
Institute of Nuclear Power Operations
1. Introduction

In the last two decades, the nuclear industry has experienced two industrywide declines — one that began in 2000 and lasted until 2005, and a second that occurred in 2010 and lasted until the end of 2012. Since then, industry performance has been improving at an almost constant rate.

At the time of this writing, nuclear industry performance is at a historic high. While a number of lower-performing companies and stations still exist, and while several noteworthy challenges to safety and reliability persist (fuel defects, scrams, and cyclical performance in operations, maintenance, and engineering fundamentals), the gains in many other areas of performance are significant and must be sustained. This is essential if the industry is going to concentrate on correcting its remaining gaps and continuously improving.

The Institute of Nuclear Power Operations (INPO) has twice compiled advice on achieving and sustaining high performance. In each case, INPO described characteristics of the industry’s highest-performing nuclear stations. However, these earlier approaches did not include benchmarking outside of the nuclear industry and did not succeed in capturing the specific set of elements needed to achieve a long-lasting culture of sustainability. Further, actionable guidance was not developed.

In 2018, INPO again analyzed the organizational aspects of sustaining performance. The goal was to identify the specific, common characteristics that exist in organizations that have achieved uninterrupted high performance for decades. Candidates outside of the nuclear industry such as Delta Airlines, the Navy Nuclear Power Program and Navy Fighter Weapons School were each examined. In addition, three nuclear stations that have sustained exemplary performance for more than 10 consecutive years were analyzed. This deeper level of analysis was enabled by recently acquired capabilities such as continuous performance monitoring and INPO’s ability to assess organizational effectiveness through a common set of leadership and team effectiveness and management attributes.

From the analysis, INPO concluded that the key characteristics that differentiated the long-term high performers were contained within their cultures and defined by five specific core values. In support of their common, deep-seeded beliefs in continuous improvement in the pursuit of excellence, they each placed particular value on their long-term views and strategic focus, their leadership and talent development, their very high performance standards, their continuous learning, and their ability to see and correct their own problems.

Together, these five core values and their associated behaviors provide a framework for a culture that is capable of sustaining high performance while also continuously improving. Aspects of these five values are already discussed in existing documents such as the Performance Objectives and Criteria and various Principles documents. This Principles document, however, discusses the necessity to combine and embed these values into an organization’s culture.
2. Belief

An overarching belief in continuous improvement in the pursuit of excellence in performance, and its central tenet that whatever gains are achieved must then be sustained, establishes the basis for this cultural effort. Stemming from this belief are the values of setting long-term direction, leadership and talent development, excellence standards, continuous learning, and self-awareness and self-correction.
3. Values

A. Setting Long-Term Direction

Value

Committing to deeply embedding a culture of continuous improvement for the long term

Discussion

An organization’s senior leaders are responsible for setting its direction. In support of the organization’s defined mission and vision, the necessary culture is contained within its written strategy, which typically has a horizon of several years. In that way, the core values that underpin the culture can outlast incumbent leaders and remain in effect for the long term. Key aspects of this value are as follows:

- The organization’s mission, vision and strategic framework, including its culture, are clearly defined and broadly communicated, and there are no misunderstandings of cultural values or behavioral expectations.
- Cultural values and associated behaviors undergo periodic effectiveness reviews, and the organization adjusts, as necessary, to ensure its culture is maintained and developed.
- Regardless of internal or external factors that may challenge the organization’s performance over time, its culture endures and underpins its ability to address its own performance issues and protect essential functions.

Behaviors

1. Senior leaders – consistently communicate the enduring nature of the mission, vision and core values by employing an array of communication methods. They frequently verify understanding and measure for effectiveness in embedding the core value elements within the workforce. Similarly, the behaviors that underpin the values are regularly communicated throughout the organization and modeled by leaders.

2. Senior leaders – leverage the strategy to achieve and sustain executive alignment up to, and including, the board of directors. As a result, every executive understands and enforces the core values and the culture that he or she represents. Senior leaders indoctrinate new leaders and follow up to ensure they both understand and adhere to the organization’s cultural norms for the long term.
3. Senior leaders – immediately communicate changes in the organization’s strategic direction, reaffirm their belief in continuous improvement, and re-emphasize core values and associated behaviors.

4. Leaders – throughout the organization, they reinforce messages and ensure they penetrate down and across the organization. New workers are quickly indoctrinated and coached in the expected standards of behavior.

5. Employees – understand how sustained excellent performance supports the mission and vision and how core values and associated behaviors, in turn, affect performance. Therefore, they take pride in their culture and actively enforce behaviors peer to peer.

B. Leadership and Talent Development

Value

Building and maintaining strong incumbent leadership throughout the organization, together with a strong, homegrown bench strength

Discussion

The highest-performing organizations always possess well-aligned and committed leaders whose individual leadership, team effectiveness and management skills are all strong. At the same time, they are deeply committed to talent development and succession planning and take personal ownership of both. As a result, they maintain ready-now high performers who ensure the organization’s long-term health. Key aspects of this value are as follows:

- Organizational effectiveness is a strength up, down and across the organization.
- Talent development is under the personal ownership of every leader. For key positions, the bench strength of ready-now successors is strong, and pipelines are healthy. In this, leaders are committed to a long view of succession planning.
- Employees are aware of their organization’s investments in their development and are active participants in it.

Behaviors

1. Leaders – deeply understand the tenets of strong leadership and team effectiveness and management, and they exercise them well. They demonstrate leadership courage by supporting one another, coaching peer to peer, and challenging inappropriate behaviors. A passion for developing others surrounds the leadership and management of the organization down to, and including, the supervisors.
2. Leaders – are committed owners of talent development and succession planning, maintain a strong bench, and — only by exception and with forethought — bring in outside talent. They are capable of describing the organization’s talent and succession processes and their role and authority in each. New leaders are immediately indoctrinated and assume ownership of talent development and actively seek to know their people.

3. Leaders – place equal emphasis on individual leadership, team effectiveness, and management skills and they periodically undergo assessments to determine the most complementary personal characteristics for key assignments and work relationships.

4. Human resources staff and line managers – maintain a strong, mutually supportive partnership and are quick to collaborate to resolve personnel challenges.

5. Employees – are vested in talent development and succession processes and maintain strong, transparent relationships with their managers and the human resources organization. At any given time, they know where they stand in their job progression, career development and succession pipeline.

6. Leaders and employees – actively seek self-improvement opportunities and do not hesitate to develop others through peer-to-peer coaching, knowledge transfer, and other teaching methods.

C. Excellence Standards

**Value**

Adhering to the highest possible standards of performance

**Discussion**

The strongest performers gauge their performance against current industrywide excellence standards rather than their own past performance. The responsibility to know and live up to standards of excellence has penetrated deeply into their organizations. Leaders model, teach and enforce standards in everything they do. The entire organization takes pride in its standards adherence; therefore, individuals coach and correct any levels of nonadherence that they witness. Key aspects of this value are as follows:

- Standards of excellence are well established, internalized and followed.
- Any new excellence standards are sought after and quickly embraced by the organization.
- Less commonly defined standards — such as desired thresholds of formality, timing of interventions, quality of coaching, and so forth — are each clearly articulated, understood and enforced.
Behaviors

1. Senior leaders – establish and embed excellence standards within their strategic narrative and ensure that they are institutionalized.
2. Leaders – can articulate excellence standards and describe “what good looks like.”
3. Leaders – communicate, model and reinforce the standards in everything they do. As a leadership team, they coach and challenge each other whenever performance falls short.
4. Leaders and employees – individually and collectively act as guardians of the standards and do not rationalize deviations.
5. Employees – are empowered to enforce the standards regardless of organizational standing, and they do. In this, they demonstrate an appreciation for both issuing and receiving coaching and challenges.

D. Continuous Learning

Value

Combining all possible sources and methods of advancing individual and institutional learning for the long term

Discussion

With continuous improvement comes an obligation to advance continuously organizational learning commensurate with its next level of performance. Continuous learning must be a passion, especially in a highly technical and complex industry such as ours. This extends beyond formal training although the organization’s commitment to training must be world class. In a continuous learning organization, every possible opportunity to mentor, teach and coach must be leveraged — whether in the classroom, lab, control room or field. Key aspects of this value are as follows:

- Leaders foster learning at every opportunity. They are deeply committed to dedicating the personal time, effort and opportunities for their organization to learn.
- Benchmarking, self-assessments and operating experience are continuously leveraged to improve performance.
- Every employee is personally committed to both teaching and learning. This is a passion for the organization.

Behaviors

1. Senior leaders – make learning part of core business. They themselves initiate learning opportunities, participate in them, and encourage others to do the same. They ensure quality
instructor assignments and ample resourcing, including infrastructure. They are powerful advocates of learning, and their passion is contagious.

2. Leaders – model, encourage and enable self-learning, and employees leverage opportunities to increase their breadth and depth of professional knowledge and skill.

3. Leaders – share knowledge gained from industry training, communicating lessons learned from industry meetings and imparting professional and leadership experiences.

4. Line and training managers – demonstrate an extraordinary partnership and ownership of performance. They each promote opportunities to advance learning to close gaps and accelerate performance improvement.

5. Managers – establish a safe environment for shortfalls in individual and team proficiency and for risks to be openly discussed and mitigated in ways that contribute to learning and that encourage future transparency.

6. Leaders and employees – openly share lessons learned with peers and, in so doing, reinforce high standards. Throughout the organization, informal peer-to-peer coaching, mentoring, and critiquing of individual and team performance are a way of life.

7. Employee groups – Through approaches such as “craftsmanship” and “operations-led” or “engineering-led” initiatives, focus is placed on employee groups to own wide categories of teaching and learning and to be proactive in advancing learning throughout their organizations. In turn, employee groups place demands on leaders to enable their learning initiatives and innovations, and they are provided the necessary time and resources to accomplish them.

E. Self-Awareness and Self-Correction

Value

Being able to find and fix one’s own problems

Discussion

An engaged workforce is one in which everyone feels empowered to own the organization’s performance and to solve problems. The highest performing organizations achieve this and, as a result, have a strong sense of self-awareness and self-criticalness. Each individual is committed to the organization’s success and openly challenges the status quo and any shortfalls. Senior leaders enable this environment and are, themselves, open to being challenged and do not hesitate to question circumstances or results until a problem has been solved. While independent views are sought after and welcomed, they are not needed to describe performance. Key aspects of this value are as follows:
Against a backdrop of excellence standards, an aggressive use of all source information by an engaged workforce uncovers performance gaps and underlying drivers early.

All employees participate and know that they are empowered to find and fix problems, including behavioral shortfalls.

Coaching and feedback are valued and encouraged.

Innovation and continuous improvement initiatives, which are often initiated from within the workforce, improve operational effectiveness and efficiency.

**Behaviors**

1. Senior leaders – enable an engaged workforce by creating a deep institutional knowledge of excellence standards, along with an organizational bias to seek out and correct deviations from them. By their words and deeds, they facilitate an inclusive, open and self-critical environment in which all employees are willing to challenge the status quo and to be challenged when their own behaviors diverge.

2. Senior leaders – embrace innovation and worker-led initiatives. In this, they reinforce a conservative bias; sound risk management; and the need to preserve and build margin into operations, design, and safety.

3. Leaders and employees – recognize that cost and performance are not mutually exclusive, and they consider both when implementing changes and corrective actions. They hold each other mutually accountable to correct shortfalls.

4. Employees – are empowered and proactive in their quest to find and aggressively fix problems. In this, they possess a deep understanding of excellence standards, are disciplined in their application, and are dissatisfied when deviations occur and intervene effectively.

5. Employees – value their own self-awareness about their proficiency, including their own strengths and weaknesses, to achieve competency.