



WANO

GLOBAL LEADERSHIP IN NUCLEAR SAFETY

WANO PRINCIPLES

PL | 2019-01

Nuclear Leadership Effectiveness Attributes

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APPLICABILITY

THIS WANO PRINCIPLES REPORT APPLIES TO ALL REACTOR TYPES

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Nuclear Leadership Effectiveness Attributes

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Introduction

Summary

As leaders in the commercial nuclear industry, we all carry a unique responsibility to uphold the highest standards of nuclear safety while producing electricity reliably. Our ability to effectively lead our organisations and teams is essential to fulfilling our obligation to all key stakeholders: our employees, the public, regulators and our colleagues in the global nuclear power community.

The reality is that after 30 years of collaboration and benchmarking throughout the industry, the programmes and processes used around the world today are very similar. The difference in performance, more than ever, is a matter of leadership effectiveness. Leadership is the key difference-maker between marginal and exceptional performance.

Background

There are numerous models for effective leadership, each having its own basis and merits. Although it would be impossible to define a comprehensive set of attributes that would satisfy all these models, there are many shared attributes applicable to the unique role of the nuclear leader.

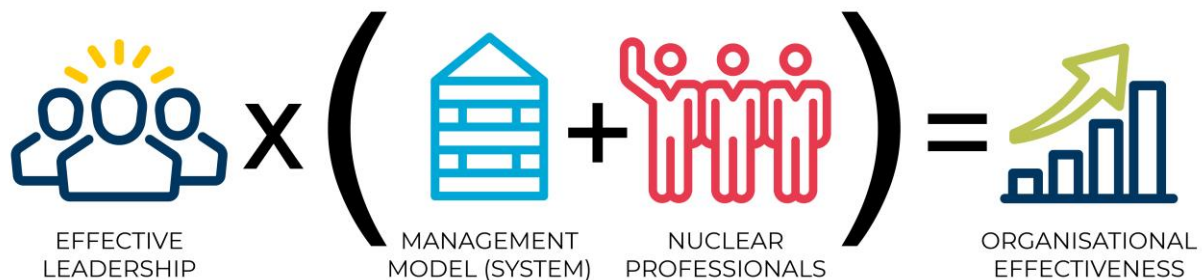
A team of 16 experienced executives and plant managers, representing multiple utilities and diverse regional cultures from all 4 WANO regional centres and the London Office, set out to define a concise set of attributes. These attributes, when observed in any nuclear power plant, would give a strong indication that leaders are being effective. The team's goal was to create an easy to read, easy to understand document useful to those who wish to improve their leadership capability or evaluate and grow leadership team effectiveness.

This document describes observable leadership attributes seen in effective organisations. The specifics of "how" these outcomes are achieved will vary from location to location, based on such variables as the station's history, regional or national culture, and the style of the leaders themselves. In addition, while all of the attributes are important, some will be more critical than others - depending on the level of performance and the specific challenges present at a particular site.

The attributes have been carefully considered to be applicable to a wide variety of regional cultures operating nuclear power plants.

How Effective Leadership Connects with the Utilities Management Model (system) to create Organisational Effectiveness

Organisational effectiveness is a function of effective leadership, a well-functioning management model (system), and a strong team of nuclear professionals. The management model includes elements such as programmes, resources, controls, governance, oversight, etc. The following diagram depicts the relationship between these elements: Leadership has a multiplying effect on Organisational Effectiveness.



When plants are in decline, have longstanding issues, or conversely, when plants have sustained long periods of strong performance, the management model itself cannot be the only driver. Instead, performance is driven by the effectiveness of the leadership team and, by extension, by how well the management model is executed.

How to Use this Document

While this document provides a detailed description of the attributes of effective leadership, it is not intended to be a “checklist”. The exact wording used to describe the attributes does not have to be duplicated in site or company specific documents. However, it is expected that these attributes be present and evident in the daily activities, behaviours, and the outcomes of your organisation.

Expected actions are to compare these attributes to your own competencies and leadership/team effectiveness model and to close identified gaps. These attributes could also be used:

- In self-assessments
- As a basis for leadership development training
- For future manager selection
- In leadership capability evaluation
- To identify actions needed to recover or improve performance

Utility managers are encouraged to make in-depth comparisons between these attributes and their day-to-day leadership and teamwork behaviours, and to use any differences as a basis for organisational improvements.

How these Attributes Cascade into each Management Level of the Organisation

It is important these attributes are demonstrated by the senior leaders of the organisation. However, effective leaders at all levels of the organisation will also exhibit most, if not all, of these attributes.

When considering each attribute, the observable behaviours for each level of the organisation may be different. The following table illustrates how one element of attribute LE.1 might be described by each level in an organisation while remaining aligned with a common vision:

| LE.1 - Establish a vision of excellence that prioritises nuclear safety | |
|--|--|
| <i>6. Leaders at all levels work with their teams to translate the vision into specific goals and actions.</i> | |
| Position | Possible Response |
| Chief Executive Officer (multiple sites) | “We are the pre-eminent nuclear energy supplier, delivering safe and reliable generation.” |
| Site Director/Plant Manager | “We will deliver safe and reliable performance to achieve our station targets with zero nuclear significant events.” |
| Maintenance Manager | “Our well trained and competent people will perform work to the highest level, respecting our rules and processes to deliver excellent results.” |
| Group Head | “The I&C group will develop the skills and competence to ensure our technicians meet the following goals...” |
| First Line Manager/Supervisor | “My valve team will meet our schedule adherence target of >95% with zero re-work by following rules and adhering to procedures.” |
| Technician leading a work group | “My group will conduct a quality job, will follow procedures, and will use a questioning attitude.” |

Links to other WANO Documents

This document was built upon a review of existing industry documents, including WANO PL 2013-1 “Traits of a Healthy Nuclear Safety Culture”, the WANO Performance Objectives and Criteria (PO&C 2013-01), INPO 15-005 “Leadership and Team Effectiveness Attributes”, among others. It is not a comprehensive summary of all the source documents, but is aligned in concept.

Definitions

Any individual within the organisation can demonstrate management skill or leadership capability, but the obligation to do so rests with the formally designated members of the management team - from the first line supervisor to the Chief Executive Officer (CEO). These individuals are empowered with formal authority and are responsible and accountable for plant and personnel performance. They are obligated to provide both effective management AND inspiring leadership. We define these obligations as follows:

NUCLEAR LEADERSHIP – the behaviour of an individual, irrespective of level, who takes the initiative to inspire by example, to coach, to influence and to shape behaviours of people in pursuit of nuclear excellence.

MANAGEMENT – the responsibilities of an individual to control, direct, plan, organise, coordinate and staff the organisation to achieve safe, reliable station operations. To monitor performance and adjust programmes and processes as necessary to achieve excellence.

Further, we summarise the WANO PO&C definitions for Manager and Leader as follows:

Any person who is appointed to oversee others or manage a process is by default a **MANAGER**, and will have a title reflecting this position: supervisor, foreman, first line manager, group head, superintendent, director, work week manager, etc.

Being a **LEADER** is a conscious choice, requiring great skill and effort. Leaders and managers are not different positions, rather different functions, often carried out by the same person. They are different sides of the same coin.

Nuclear Leadership Effectiveness Attributes

- Establish a vision of excellence that prioritises nuclear safety (LE. 1)
- Engage the workforce (LE. 2)
- Create an environment of teamwork, trust and cooperation (LE. 3)
- Drive for sustainable results (LE. 4)
- Build leadership capability (LE. 5)

Framework

LE. 1 - Establish a vision of excellence that prioritises nuclear safety

Leaders establish and promote a clear and inspiring vision of excellence which recognizes the special and unique nature of nuclear power.

1. Leaders are personally committed to nuclear safety as the overriding priority.
2. Leaders inspire ownership and personal responsibility for nuclear safety by all individuals in the organisation.
3. Leaders create clear and challenging goals that align with industry best performance and practices.
4. Leaders actively engage the team at all levels in the development of a vision of excellence.
5. Leaders clearly communicate the vision, the strategy, and goals to all employees including contractors and partners.
6. Leaders at all levels work with their teams to translate the vision into specific goals and actions.
7. Leaders demonstrate by words and actions their full commitment to the vision and strategy.
8. Leaders continually benchmark their organisation and periodically review and update the vision of excellence to reflect the progress made by the plant and the nuclear industry.

LE. 2 - Engage the workforce

Leaders build and sustain trusting relationships by listening, acting and communicating with integrity. They engage people to form an aligned workforce who are willing to strive for, and sustain, excellent performance and high levels of nuclear safety.

1. Leaders create a positive environment and inspire people to want to do their best.
2. Leaders set a personal example by modelling the desired behaviours of a Nuclear Professional.
3. Leaders communicate openly, honestly, and act with integrity.
4. Leaders seek out, listen for and are receptive and responsive to differing ideas, concerns, questions, and opinions.
5. Leaders demonstrate resilience and motivate people — especially during periods of plant challenges, or extended recovery.
6. Leaders recognise and reward individual and team achievements.
7. Leaders communicate proactively and explain the “why” behind their actions and decisions, especially during periods of change.
8. Leaders have a visible presence in the field, reinforce positive behaviours, and identify performance gaps and development opportunities for both individuals and teams.

9. Leaders encourage employees at all levels to identify gaps and make improvements in activities, processes, and working conditions.
10. Leaders recognize the nature and causes of human error and first seek to understand before reaching conclusions and simply blaming individuals.

LE. 3 - Create an environment of teamwork, trust and cooperation

Leaders encourage teamwork and cross-functional cooperation by utilising the collective competencies of diverse teams and individuals to improve nuclear safety, enhance decision making, prompt action, and optimise plant performance.

1. Leaders have an obligation not only to do their best as individuals but also to ensure they perform effectively as a critical member of their leadership team.
2. Leaders promote teamwork by encouraging communication, collaboration and cross-functional cooperation across all levels of the organisation.
3. Leaders create an environment where individuals hold themselves and each other responsible for team performance and collective success.
4. Leaders engage with teams to set clear, motivating, and challenging performance goals in support of the organisational vision.
5. Leaders intervene in a timely manner when ownership of issues is uncertain among teams, when team conflicts exist, or when progress towards achieving results is inadequate.
6. Leaders promote a healthy safety-conscious work environment by encouraging team members to seek out and resolve problems, issues, and safety concerns.
7. Leaders ensure individuals are fully committed to team goals and planned actions.
8. Leaders seek out and correct examples of unsupportive behaviour where they exist.
9. Leaders encourage teams to consider alternative perspectives to avoid “group-thinking”.

LE. 4 - Drive for sustainable results

Leaders drive sustainable results by shaping organisational behaviours and by relentlessly reinforcing high standards to achieve ownership & accountability for performance. They challenge themselves and their organisation to recognise and prevent complacency.

1. Leaders demonstrate ownership for organisational decisions and drive for a successful outcome.
2. Leaders demonstrate a bias for prompt actions in response to signs of decline, even when small.
3. Leaders have the courage to challenge the status quo, make difficult decisions, and take prompt action to correct organisational or cultural issues when required.

4. Leaders provide candid and timely feedback to correct shortfalls and nurture ownership — creating a culture of healthy accountability to improve performance.
5. Where leaders are aware of gaps to accepted standards of behaviours or actions, they respectfully challenge to ensure people understand the gap and facilitate closure.
6. Leaders ensure decisions are made at the appropriate organisational level and that risk is considered, understood and managed.
7. Leaders continuously promote a culture that encourages the identification, reporting and closure of concerns.
8. Leaders ensure corrective actions go deep enough to address any underlying organisational, behavioural or cultural causes.
9. Leaders actively encourage the use of error prevention techniques to prevent events.
10. Leaders embrace the use of benchmarking, internal and external assessments, operating experience, and training to drive continuous improvement.

LE. 5 - Build leadership capability

Leaders develop themselves and others to create an effective organisation comprised of diverse, qualified, capable, and proficient individuals able to sustain long-term positive performance.

1. Leaders practice and develop the skills necessary to improve their own leadership capability.
2. Leaders ensure positions are filled with well-qualified candidates who have the behaviours, necessary expertise, and experience to be successful leaders during both normal operations and during severe accident or critical situations.
3. Leaders support diversity as an important factor in talent management and leadership development.
4. Leaders actively develop and mentor others by sharing the knowledge gained from their industry, professional, and leadership experiences.
5. Leaders personally engage in succession planning activities and consider organisational risks associated with personnel changes.
6. Leaders proactively identify, support, and provide development opportunities to individuals with leadership potential.
7. Leaders routinely assess individual and team performance and make adjustments in team composition as necessary for the organisation to succeed.
8. Leaders establish a culture where new members support one another, and are supported by more experienced leaders, to build their leadership proficiency.

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