Institute of Nuclear Power Operations

INPO and IAEA Approaches to Describing Safety Culture

G. Kenneth Koves, Ph.D.

Sr. Program Manager INPO

Overview

- Introduction

- Similarities Between Approaches

- Definitions

- Principles/Characteristics

- Attributes

Introduction

- Ph.D. in Industrial/Organizational Psychology from Georgia Tech

- Worked at INPO for 6 years

- Was a member of the IAEA Safety Culture Assessment Review Team (SCART) mission to Laguna Verde in November 2009

Similarities of Approach

Tier 1

INPO – Definition

IAEA – Definition

Tier 2

INPO – Principle

IAEA – Characteristic
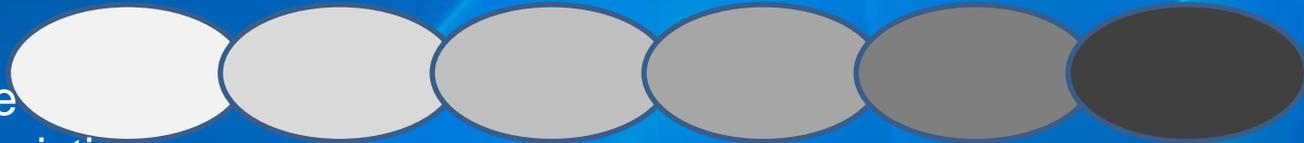
Tier 3

INPO – Attribute

IAEA – Attribute
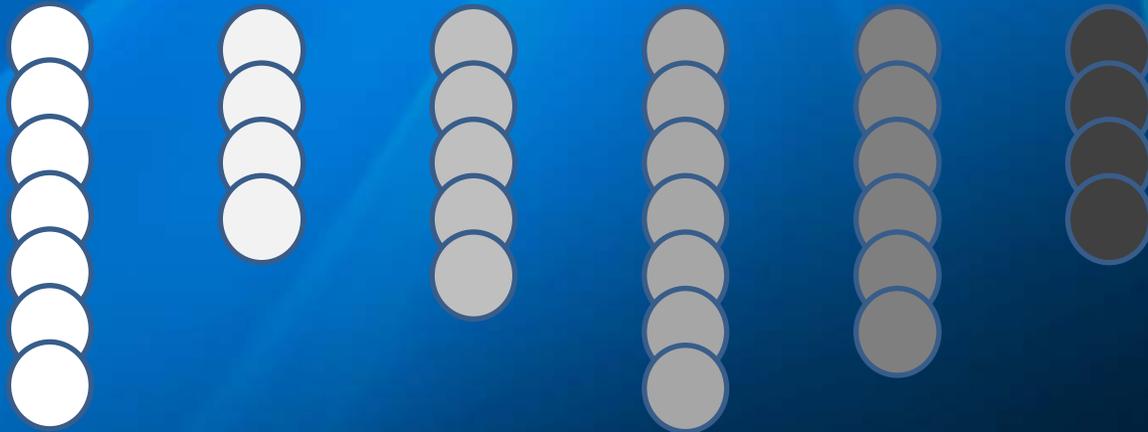
Tier 1 – Definitions

- INPO (2004) – Safety culture: An organization's values and behaviors – modeled by its leaders and internalized by its members – that serve to make nuclear safety the overriding priority

- IAEA (INSAG 4, 1991) – Safety culture is that assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance

Tier 2 – Principles and Characteristics

INPO (2004)

1. Everyone is personally responsible for nuclear safety
2. Leaders demonstrate commitment to safety
3. Trust permeates the organization
4. Decision-making reflects safety first
5. Nuclear technology is recognized as special and unique
6. A questioning attitude is cultivated
7. Organizational learning is embraced
8. Nuclear safety undergoes constant examination

IAEA (SCART, 2008)

1. Safety is a Clearly Recognized Value
2. Leadership for Safety is Clear
3. Accountability for Safety is Clear
4. Safety is Integrated into All Activities
5. Safety is Learning Driven

Example Definition— INPO Principle #8

Nuclear safety undergoes constant examination

- Oversight is used to strengthen safety and improve performance. Nuclear safety is kept under constant scrutiny through a variety of monitoring techniques, some of which provide an independent 'fresh look.'

Tier 3 – Attributes with INPO Principle #1

Everyone is personally responsible for nuclear safety

- The line of authority and responsibility for nuclear safety is defined from the board of directors to the individual contributor.

- Support groups, such as human resources, labor relations, and business and financial planning, also understand their roles in contributing to nuclear safety.

- People and their professional capabilities, values, and experiences are regarded as the nuclear organizations most valuable asset.

- All personnel understand the importance of adherence to nuclear safety standards.

- Relationships among utilities, operating companies, and owners are not allowed to obscure the line of responsibility for nuclear safety.

Tier 3 – Attributes with IAEA Characteristic #1

Safety is a clearly recognized value

- The high priority given to safety is shown in documentation, communication, and decision-making.

- Safety is a primary consideration in the allocation of resources.

- The strategic business importance of safety is reflected in the business plan.

- Individuals are convinced that safety and production go hand in hand.

- A proactive and long-term approach to safety issues is shown in decision-making.

- Safety conscious behavior is socially accepted and supported (both formally and informally).

Questions?