



# NRC Annual Assessment Meeting

## Perry Nuclear Power Plant

April 10, 2013



# Agenda

- **Perry Priorities 2013**
  - Vito Kaminskas, Site Vice President-Perry
- **Perry Plant Status Update**
  - Jim Veglia, Director, Site Maintenance-Perry
- **Radiological Safety Program Improvements**
  - Stan Baker, Manager, Radiation Protection-Perry
- **Readiness for NRC Supplemental Inspection**
  - John Grabnar, Director, Site Operations-Perry



# Perry 2013 Priorities

- Safe, Secure, Reliable, Cost-Effective Operations
- Successfully Complete INPO Evaluation and Assessment
- Safe and Successful Completion of 1R14 Refueling Outage
- Perform Radiological Work Error-less and Event-free
- Demonstrate Commitment to Training and Qualifications to Improve Personal and Station Performance
- Demonstrate Performance Warranting Return to Column 1 of the NRC Reactor Oversight Process
- Work Together to Create an Environment of Respect, Cooperation and Recognition of Our Achievements

# Improving Performance at Perry

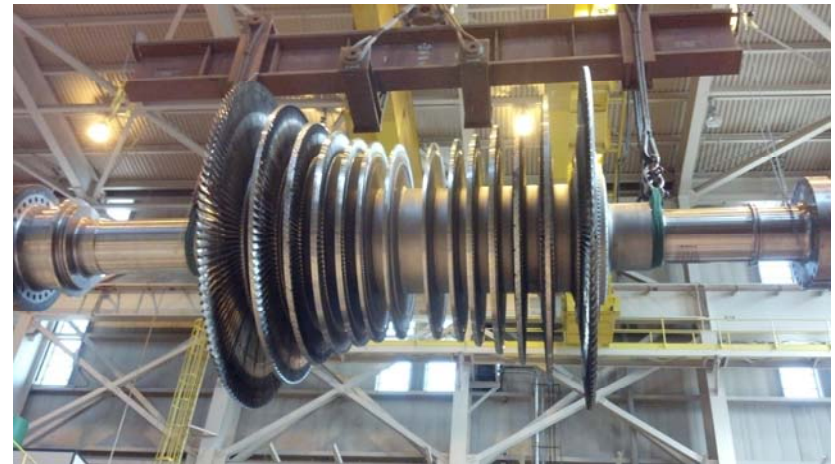
- **Focus on our Priorities**
- **Take Action on Feedback provided by:**
  - Nuclear Regulatory Commission
  - Institute of Nuclear Power Operations
  - Company Nuclear Review Board (CNRB)
  - Internal Oversight
- **Increased engagement with our Fleet Organization**
- **Targeting Corrective Action and Self Assessment improvement**

# Perry Plant Status Update

## Jim Veglia

# Perry Plant Status

- **14<sup>th</sup> Refueling and Maintenance Outage Began March 18**
- **Improvements to Enhance Worker Safety and Equipment Reliability for Safe, Long-Term Performance:**
  - Three New Low-Pressure Turbine Rotors
  - Residual Heat Removal System Chemical Cleaning
  - Major Valve Replacements
  - Refueling
  - Inspections and Maintenance on Plant Components, including: Reactor Vessel, Emergency Diesel Generators, Cooling Tower



# Outage Performance

- **Nearly 13,000 work activities**
- **Outage Performance Goals**
  - Nuclear Safety
  - Personal Safety
  - Environmental Safety
  - Radiological Safety



# Radiological Safety Program Improvements

**Stan Baker**



# Radiological Safety Program Improvements

- Increased Management Oversight and Coaching
- Enhanced Worker Ownership and Engagement
- Increased Accountability
- Improved worker behaviors are anchored in our processes and procedures to ensure safe, sustained performance

**RADIOLOGICAL ACCESS REQUEST AND BRIEFING FORM** M1000.1

NOP-OP-4101-05 Rev. 02

**Radiological Brief**


**INITIAL ENTRY BRIEFING**

State the following for HRA, LHRA, VHRA: This is a Technical Specifications required briefing. Entering areas not discussed during this briefing is a violation of Technical Specifications. Failure to comply with the requirements of the brief and RWP will result in your restriction from the RCA, and can lead to regulatory violations and actions against the plant and personnel involved. Do not deviate from stated transit path or work areas.

Verify that:

Yes	N/A	Item	Yes	N/A	Item
<input type="checkbox"/>	<input type="checkbox"/>	RWP to be used is appropriate for the Task	<input type="checkbox"/>	<input type="checkbox"/>	Notify RP of any work changes
<input type="checkbox"/>	<input type="checkbox"/>	List the Survey Number(s) used for brief: REF: CA-2011-033534	<input type="checkbox"/>	<input type="checkbox"/>	Read EAD @ frequency
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	All dose rates Accessible to Worker(s) in HRAs or above. REF: CA-2011-033534, Ref. CA-2011-033534

Instruct worker to/for:


**KIP**  
 Keep Improving Performance  
KIP Observation & Coaching Card  
NOBP-LP-240 4-01  
Rev. 01

Beaver Valley    Davis Besse    Perry

**Introduce Yourself and Discuss the Purpose of Observation**

Observation: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Action taken: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Observer: \_\_\_\_\_

Section/Department \_\_\_\_\_

Date: \_\_\_\_\_

Condition Report, if written: \_\_\_\_\_

Place in KIP Card Box or send to Safety & Human Performance

**We Coach...Because We Care!**

**Perry Radiologically Controlled Area Trip Card**

PNPP No. 10495 Rev. 10/29/12

Name: \_\_\_\_\_ Date: \_\_\_\_\_

RWP #: \_\_\_\_\_ Rev: \_\_\_\_\_ Task #: \_\_\_\_\_

Work Location \_\_\_\_\_

Work Scope: \_\_\_\_\_

\_\_\_\_\_

Dose Alarm Setpoint: \_\_\_\_\_ mrem

Dose Rate Alarm Setpoint: \_\_\_\_\_ mrem/hr

Dose Estimate for this job? \_\_\_\_\_ mrem

Circle One

Contaminated Area Entry Required?    Yes    No

High Radiation Area Entry Required?    Yes    No

Work will be conducted above 6 feet?    Yes    No


Will be Moving Radioactive Material?    Yes    No

If the answer to any of the above questions is YES, then you cannot "Self Brief" and a Radiological Brief is required by RP Before you may proceed beyond the RCA Control Point.

RP Control Point 5491 / 5492    (TURN CARD OVER)

# Tools to Enhance Decision-Making

- Workers use the **2-Minute Drill Card** for safe, event-free performance
- Supervisors use the **READE Tool** for better decision-making



## FENOC

### 2-Minute Drill

Potential Job Site Hazards

Permits/Procedure	Housekeeping/FME
Confined Space	Lighting/Ventilation
Overhead Loads	Slips/Trips/Falls
Chemical Use/Storage	Sharp/Hot/Wet Surfaces
Pinch Points	Zero Energy
Bending / Lifting	Electrical
Heat Stress	Line of Fire

### Recognize and Mitigate Risk

**What**

- What task are we performing?
- What errors could be made?

is the probability (chance) of it happening?  
 are the consequences if it happens?  
**ion**  
 are we doing to make sure it doesn't happen?  
 tools are applicable?  
 defenses are in place?  
**se can happen?**

Engaged Thinking Organization Prevents Events"  
**SOER 10-2**

### FENOC Conservative Decision Making

Risk = Likelihood x Consequence

A deliberate decision making method to respond to uncertain situations that promotes better decision-making, more predictable results and less risk.

1. **Recognize** the degraded condition or uncertain situation that threatens safety.
2. **Express** the situation in terms of consequences, if left alone, related to the following:
  - Plant safety and reliability
  - Personal safety and well-being
  - Environmental safety
3. **Appraise** the situation, with a questioning attitude, to identify conditions that could threaten safety, such as the following:
  - Conflicts with safety and pressure to proceed with the plan
  - Degree of familiarity with the situation – how novel is it
  - Time available to make a decision
  - Degree of coordination, complexity, and margin sources of stress
  - Sources of stress
  - Availability of resources and support
  - Assumptions that need validated

**NOTE:** The less time available to make an informed decision, then the more readily one should yield to safety.

4. **Decide** what to do to resolve the situation safely. Compare Appraisal (step 3) to critical parameters, safety limit, or abort criteria. Consider what absolutely has to go right. Stop when unsure. **Do not proceed in the face of uncertainty.**
5. **Evaluate** the effectiveness of the action(s) (step 4) in achieving the desired results. Perform a post-job brief.

Did you document your decision?

Rev. 01

# Success of Radiological Safety Program

- Safe Work Performance
- Monitor and Adjust Performance
- Track Performance



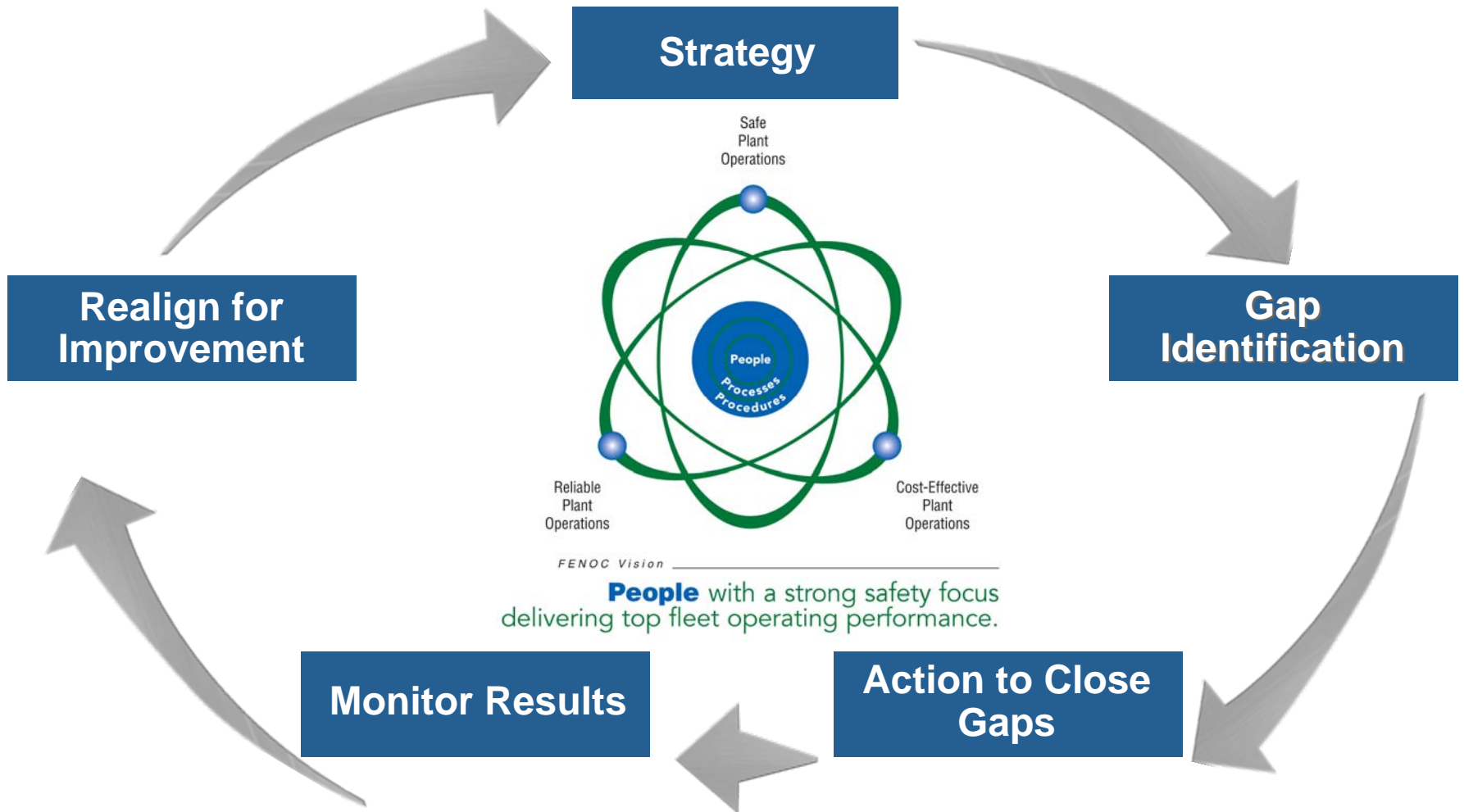
# Performance Indicators

- Dose Performance 2012
- PCE Performance 2012
- Dose Rate/Dose Alarms
- LHRA Performance



# Readiness for NRC 95002 Inspection John Grabnar

# Continuous Improvement Process



# Continuous Improvement Process

- Initiated investigative process through Corrective Action Program to identify gaps in performance
- Implemented actions required to close gaps:
  - Radiation Protection
  - Corrective Action Program
  - Risk Management
  - Human Performance
  - Accountability

Gap  
Identification



Action to  
Close Gaps

# Continuous Improvement Process

- Monitor performance through:
  - Coaching and Observations
  - Worker Feedback
  - Data Collection
  - Performance Indicators
- Realign for Improvement
  - Initiated additional cause analyses based on monitoring results
- Strategy
  - Initiated additional corrective actions



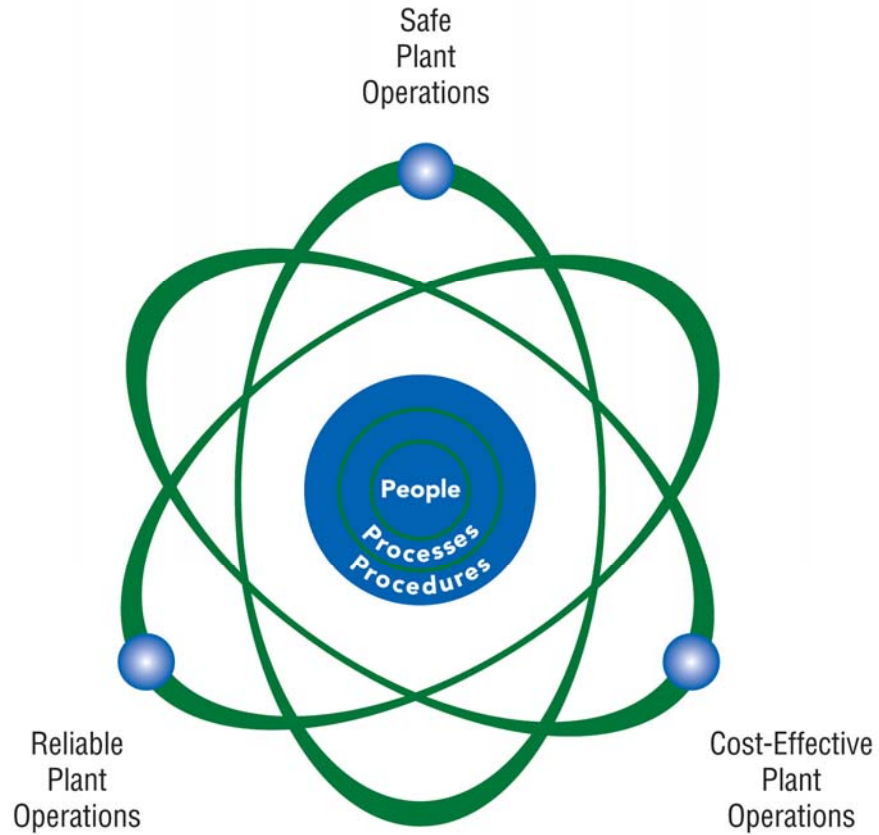


# Objectives of Supplemental 95002 Inspection

- **Objective 1:** Provide assurance that the root and contributing causes of individual and collective risk-significant performance issues are understood.
- **Objective 2:** Independently assess and provide assurance that the extent of condition and extent of cause of individual and collective risk-significant performance issues are identified.
- **Objective 3:** Independently determine if safety culture components caused or significantly contributed to the individual and collective risk-significant performance issues.
- **Objective 4:** Provide assurance that corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence.

# Perry is Ready for Supplemental Inspection

- **Through FENOC Continuous Improvement Process, we have:**
  - Implemented corrective actions to close performance gaps
  - Met the four objectives of the 95002 Inspection Process
  - Meeting milestones to confirm our readiness for inspection
- **We look forward to demonstrating our improved performance during the NRC supplemental inspection beginning June 10.**



*FENOC Vision* \_\_\_\_\_

**People** with a strong safety focus  
delivering top fleet operating performance.