



Smart. Focused. Done Right.®



Charting the Course to Success

Nuclear Plant Recovery Overview

July 2022

Introduction

Getting nuclear plant recovery right *isn't* easy.

These are *large initiatives* that require extensive time, knowledge, skill, and coordination. What's more, a sustainable recovery requires improving not only plant operations but also plant culture and the effectiveness of the personnel.

In this presentation, we answer some of the **initial questions** you may have as you start to think about your nuclear plant recovery effort:

1.

How **Do We Know** There Is a **Problem**?

2.

What **Goals/Objectives** **Must We Achieve**?

3.

Can a **Philosophy** **Improve Our Results**?

4.

Is There a **Proven Path** to **Success**?

5.

What **Tools** Will **Help Us**?

6.

What Are the **Lessons Learned**?

7.

Who Knows the **Path** and Can **Guide Us**?

How Do We Know There Is a Problem?



A nuclear plant's performance can vary over the life of the asset. Over time, a plant's performance may deteriorate without the reason being abundantly clear to even the people most familiar—those who are immersed in the plant's daily operations. *If any of the below statements **sound familiar**, it is time to take a deeper look*

Our experience suggests that listening for these kinds of leading indicators can help you intervene earlier and be more successful sooner:

- “Our previous recovery teams and recovery efforts **have failed**” – yielding no sustained results for their core mission What Goals/Objectives Must We Achieve?
- “We know that KPI says we are underperforming, but **this is why**” – explaining away and/or justifying underperformance in relationship to industry peers without deeper analysis as to why
- “That KPI **doesn't accurately measure us**, our department is different” – relaxing or justifying key metric definitions to make things (backlogs, events, corrected actions, etc.) appear better than they are
- “It is probably **because of...**” – not getting to the core underlying issues during Apparent Cause Investigations and Root Cause Investigations – another sign may be repeat events
- “It is probably **because of...**” – not getting to the core underlying issues during Apparent Cause Investigations and Root Cause Investigations – another sign may be repeat events
- “I'll let it slide this time, but just make sure you do it **next time**” – excusing incomplete actions; accepting rather than challenging
- “But that **is not our priority**; our department is focused on...” – cultivating a siloed organization where site leadership is not aligned with common goals; “one plant, one team” mentality not present

What Goals/Objectives Must We Achieve?

Plant recoveries are the large efforts, but the **two main objectives** are very clear:

1.

Improve
**fundamental
behaviors** and
plant operational
performance



2.

Ensure
leadership team
communicates a
**consistent
message** to all
stakeholders on
the recovery
effort



It is critical to develop a plan that is unified and executable. Recognize that there is a problem and commit to resolving it together.

Can a Philosophy Improve Our Results?

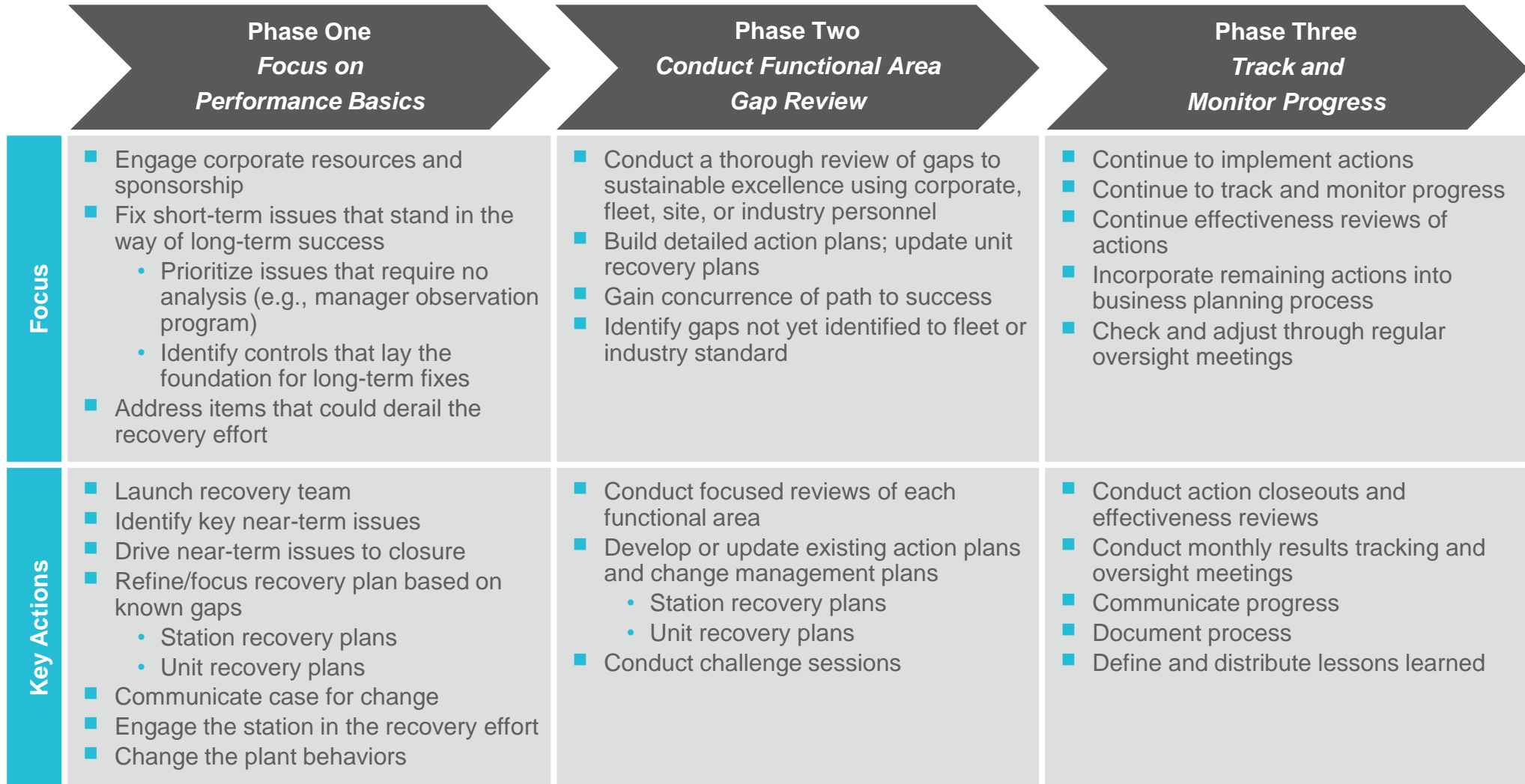
Yes, a plant recovery philosophy can improve your team's results. However, it is critical that the plant recovery team develops the philosophy in-house, meaning your team must own it. A typical recovery philosophy achieves the following:

- **Commits the station to long-term success** – bakes fleet and industry standards into the plans and implementation
- **Builds alignment on the problem(s) to be fixed** – ensures station personnel (employees and contractors) understand the current performance as well as the desired future state and plan for getting there
- **Celebrates quick wins** – addresses immediate issues to build momentum/stakeholder buy-in
- **Sets the tone/culture upfront** – outlines the expectations for ongoing operation discipline
- **Emphasizes execution** – has bias for action and follow-through
- **Is comprehensive** – “no shortcuts”
- **Ensures clear site ownership and accountability** – actions and results are the station's responsibility to execute with corporate/fleet support to ensure 200% accountability in the solution
- **Engages and aligns corporate, fleet, and site leadership in the recovery plan**
- **Displays excellence** – demonstrates to external (e.g., INPO, NRC) and internal stakeholders that we can find and fix our problems
- **Keeps it simple** – does not mistake activities for performance improvement; highlights the importance of the right work being done at the right time, the first time
- **Focuses on results** – identifies and tracks clear metrics that will demonstrate real change, not just effort or activity



Is There a Proven Path to Success?

Yes. This three-phase approach has been proven by multiple nuclear operators.



This proven approach aligns with actions described in INPO 12-011.

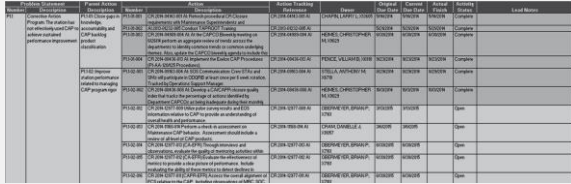

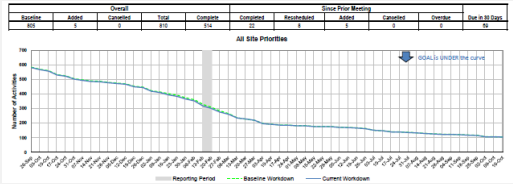
What Tools Will Help Us?

There are two tools essential to every plant recovery effort: a dedicated team of experts who are taken out of their current roles to drive improvement and a time-tested toolkit.

The Recovery Team:

- Is cross-function by design
- Includes fleet, corporate, and site personnel
- Drives the development of the recovery plan

The Plant Recovery Toolkit:

Tool	Description	Example
Recovery Plan	<ul style="list-style-type: none"> ■ Focuses on the key themes and actions required for improvement – not a list of “good ideas” ■ Simplistic enough to communicate to internal and external stakeholders ■ Guides and aligns the station leadership and recovery team efforts 	
Functional Area Gap Reviews	<ul style="list-style-type: none"> ■ Identifies the performance gaps that are standing in the way sustainable excellence ■ Engages corporate and the sites in a collaborative process to prioritize and drive the solutions on path to success 	
Closure Quality Review Committee	<ul style="list-style-type: none"> ■ Reviews dashboard/burn-down curves and other content to ensure progress is being made on recovery plan ■ Ensures that recovery plan actions are completed on time and to high-quality standards 	

What Are the Lessons Learned?

ScottMadden has successfully led more than 15 nuclear plant recovery projects. Here is what we have learned.

Phase One Focus on Performance Basics

- Recovery team staffing should come from outside of the recovery plant, if possible
- Transparency of what the recovery team is working on and the results they are producing is critical
- Recovery plan should include all identified performance gaps (e.g., INPO AFIs, 95-003 findings, etc.)
- Leadership changes early on can set the tone for the organization
- Corrective action program (CAP) actions closed without quality are a leading indicator of behaviors
- Recovery team's focus should be to train site personnel on what excellence looks like (e.g., meeting behaviors, outage scope freeze)
- Recovery team should consist of individuals who know what excellence looks like

Phase Two Conduct Functional Area Gap Review

- Focus needs to be on identifying unknown/undocumented gaps to industry excellence
- Performance gap analysis and action planning are conducted collaboratively, not just another critique without “some skin in the game” to fix the problem



Phase Three Track and Monitor Progress

- Leadership needs to meet consistently to review progress and create a burning platform for gap closure
- Tracking of site recovery plan action status should be done through regular CAP action-tracking reporting
- Accountability meetings are held to review action closure and results
- Results book showing all successes and metrics should be developed and reviewed at oversight meetings



Who Knows the Path and Can Guide Us?

ScottMadden **knows the path** and has been helping clients navigate the nuclear industry for more than **30 years**

ScottMadden **knows** how to recover performance of nuclear power plants, **because we**



Know “**what good looks like**”
to INPO and NRC



Co-developed the **first iteration of INPO 12-011** – An Implementation Framework to Significantly Improve Nuclear Plant Performance



Understand how to leverage a fleet and industry to turn around plant performance



We have led **more than 15** nuclear plant recovery projects

Who Knows the Path and Can Guide Us?

ScottMadden **knows the nuclear industry**, because we:



Have delivered projects to **more than 80 percent of the operating and decommissioned commercial nuclear generation stations** in North America



Understand our clients' commitments to **safe, reliable nuclear operations**, especially while undertaking operational changes, including **controlling costs, and implementing improvements in costs and operational performance**



Have **trained industry experts** on **corporate governance and oversight**

ScottMadden delivers real results.

Our approach is practical and can be put into play immediately. ScottMadden excels at helping our clients take ownership and to continue achieving results—even after the consultants leave the sites

Want to Learn More?



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