

Rebuilding reliability: strategy and coaching in a high hazard industry

Evan H. Offstein

Department of Management, Frostburg State University, Frostburg, Maryland, USA

Raymond Kniphuisen

Excelerated Leadership Partners, Midlothian, Virginia, USA

D. Robin Bichy

Excelerated Leadership Partners, Ashburn, Virginia, USA, and

J. Stephen Childers Jr

Department of Management, Radford University, Radford, Virginia, USA

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Abstract

Purpose – In light of and due to the spike in concern regarding high hazard industries, in general, and nuclear power plants (NPPs) in particular, resulting from the Japanese earthquake and crisis at Fukushima, the purpose of this paper is to offer an innovative organizational development (OD) intervention that may enhance safety and operational performance directed at these critical organizations.

Design/methodology/approach – Drawing on and integrating key elements of strategy, leadership coaching and development and assessment, the authors describe and detail an intervention designed to bring a troubled NPP to a state of reliability.

Findings – It was found that performance improved in a relatively short amount of time from implementing this OD tool.

Practical implications – The findings contained herein may apply to any organization aiming to improve on safety and operational performance.

Originality/value – The paper's findings should appeal to high hazard and high reliability organizations, such as those found within the energy industry, that must continuously strive toward improved operational and safety performance.

Keywords Organizations, Strategic planning, Hazards, Nuclear energy industry, Organization reliability, Organizational development, High hazard industries, Executive coaching

Paper type Case study

Introduction

High hazard industries and the organizations that operate within them capture the imagination of a variety of stakeholders to include regulators, politicians, citizens, and scholars. This interest is well founded as better understanding and improved reliability of the organizations competing in high hazard industries is in the collective best interest of all stakeholders. The term reliability, in this context, is used as an indicator of an organization's ability to meet established goals and guidelines- not merely as an indicator of efficiency (Weick, 1987). Indeed, high hazard organizations are particularly noteworthy as failures are met with considerable consequence to include catastrophic loss of life and



irreparable harm to the environment (Blix, 1989; Carroll and Cebon, 1990; Medvedev, 1992). While the public fear of high hazard industries is well chronicled and dates back decades or more (Fischhoff *et al.*, 1981), there is renewed interest in assuring the effective management of high hazard organizations. Couched within the larger context of the Japanese earthquake and Fukushima crisis, we turn our attention to, perhaps, the most critical of all high hazard organizations – nuclear power plants (NPPs).

Across continents, the effective, safe, and efficient management of NPPs receives considerable attention. Carroll (1995, 1998) and other scholars describe the rationale for studying NPPs. Notably, they are a public concern and often create social tension (Carroll and Cebon, 1990; Carroll and Hatakenaka, 2001; Carroll *et al.*, 2002a). Also, practitioners and academics alike suggest that NPPs are particularly difficult to manage (Carroll and Cebon, 1990; Perin, 1995, 1998). However, both theoretical and empirical research suggests that improved management systems and strong leadership often separate top, middle, and low industry performers (Chandler, 1977; Rumelt, 1974, 2011). The essence of this argument is that the technology is stable, uniform, and proven and that most NPPs are built around light water reactors that are designed and engineered by a handful of specialty manufacturers (Carroll and Cebon, 1990). The dominant logic, then, is that differences in operational or safety performance cannot be adequately explained by technology or structural design. By extension, leadership and effective management systems may prove a critical, causal factor in impacting and improving NPP performance. Management matters.

Generally, the literature surrounding NPPs can be characterized along several lines. First, a good portion of the research on NPPs is governmental or quasi-governmental. Agencies such as the Nuclear Regulatory Commission (NRC) or the quasi-governmental, Institute for Nuclear Power Operations (INPO), conduct surveys, studies, and investigations such as root cause analyses. Some may consider this research as atheoretical, reactive, or lacking insight from management practice and theory. A related criticism is that regulators often exclusively concentrate on the reporting and analysis surrounding final outcomes (e.g. accident rates, scrams, radiation exposure, industrial accidents) (Marcus *et al.*, 1989b). By extension, processes are often left unexplored in favor of a focus on outcomes. Second, most of the research of high hazard industries, in general, and NPPs, in particular, has been conducted by a handful of researchers, with the studies by Carroll (Carroll and Cebon, 1990, Carroll, 1995, 1998, Carroll and Hatakenaka (2001), Carroll *et al.*, 2002a, b) dominating the field. Finally, a majority of this research focuses on the organizational behavior (OB) topic of learning or some variant thereof (Carroll, 1995; Carroll *et al.*, 2002a, b; Perin, 1995, 1998).

This study recognizes the growing and heightened importance of effective management of high hazard organizations and NPPs. Our core research question aims to answer a practical problem with theoretical and academic underpinnings. Namely, how can NPPs be better managed? In our search to answer this research question, we also arrive at an applied and practical purpose. Specifically, the purpose of this paper is to suggest and detail how improved organizational development (OD), management, consulting, and coaching processes contribute to enhanced performance. While the context, here, is limited to high hazard organizations, such as NPPs, it is likely that the findings and model outlined here could apply to a variety of organizations – high hazard and otherwise.

To answer our research question along with addressing our research purpose, we employ strategies consistent within the organizational and management change literature. Namely, we describe the design and implementation of an innovative performance management process that draws on the human resources (HR), OB, and OD disciplines. We then describe the real-world implementation of this intervention in a North American NPP. The facility in which this approach was implemented is a noteworthy setting as it has received substantial applied, regulatory, and scholarly inquiry in the past. We present our study in the form of a modified case study[1].

Our launch into this study begins by orienting the reader towards high hazard industries, in general, and NPPs, in particular. Here, we will also detail and describe the setting of this case study. From this point, we offer a high-level critique of strategic planning along with some of the limitations of the leadership/executive/management coaching literature. Then, and based on many of the shortcomings of the strategic planning and coaching literature along with the unique challenges that we initially raise about managing high hazard organizations such as NPPs, we offer a model for improved performance that we term strategic performance management (SPM). Finally, we explain how this intervention was introduced and the results and emerging trends after a 12-month period. We conclude by discussing the implications of this OD/coaching intervention both within and outside the high hazard arena along with the impact that this approach may have on the executive coaching and consulting domains.

High hazard industries and NPPs

There is compelling theoretical and empirical evidence to suggest that high hazard organizations, in general, and NPPs, in particular, are incredibly difficult to manage (Carroll and Cebon, 1990; Mintzberg, 1988; Rousseau, 1979). The challenge of these types of organizations originates from the notion that they are socio-technical systems. Organizations, such as these, are characterized as a complex mix of technology, human factor, social interaction, and external demand variables (Rousseau, 1979). Of course, these variables do not operate in isolation. Rather, they are interdependent and highly coupled (Carroll and Cebon, 1990; Rousseau, 1979). Scholars such as Carroll and Cebon (1990) note that interdependence is often sequential in nature meaning that the failure of any one component can lead to a rapid, often undetected, change or rapid failure in other components or variables. Hence, when the forces of complexity merge with the forces of tight system coupling and interdependence, simultaneous and unpredictable system failures can occur. Obviously, these failures in reliability can be extremely detrimental to a myriad of stakeholders due to the environment in which these organizations operate (Weick, 1987).

In a similar vein, high hazard organizations and NPPs are often operationally process driven organizations[2]. Strict adherence to processes, at the extreme, can have a deleterious impact on learning and knowledge capture (Reason, 1990; Sitkin *et al.*, 1994). As a result, emerging evidence has surfaced to suggest that basic reports and root cause analyses in these types of organizations suffer from a host of maladies to include intellectual shallowness, lack of imagination, and a dearth of creativity (Carroll, 1995; Reason, 1990; Rasmussen and Batstone, 1991). Mintzberg (1988) captures this difficulty in high hazard organizations by informing us of the tension between “machine like compliance” to processes demanded by standard operations and maintenance and the need for innovation and collaborative creativity, usually by engineers, to solve the

complexities of highly coupled, interdependent organizations. Not surprisingly, these tensions are often difficult to reconcile and manage (Perin, 1998).

Like other high hazard organizations, NPPs invite heightened scrutiny from external stakeholders. So, in addition to managing and leading internal stakeholders, managers and senior executives must often deal with government agencies, utility trade associations, insurers, public interest groups (which may or may not be hostile), politicians and lawmakers, and associated media both traditional and social in nature. Consequently, senior managers at NPPs, to be effective, must successfully manage a host of both internal and external stakeholders.

In summary, OD interventions directed at high hazard industries such as NPPs should account for these organizational challenges. Namely, the OD/performance management system should address the management of social and technical interdependences, account for the process orientation that may inhibit learning, and speak to the need to manage both internal and external stakeholders.

There are a few theoretical models available, advanced by Carroll and Cebon (1990), which prescribe ways to organize high hazard organizations. For instance, Carroll and Cebon (1990) suggest that NPPs should be organized for optimum performance by accounting for five sets of specific variables: environment, context, organizational governance, organizational design, and emergent processes. They further predict that top performance in the industry is by those power stations that are able to proactively initiate and implement change in any of the above elements and the relationships between those variables. In this manuscript, we focus on the variable that we believe that is most affected by managerial discretion, decision-making, and influence – emergent processes. Emergent processes often encompass such subsets of variables to include: learning, culture, cross functional relations, training, attitudes, and stress (Carroll and Cebon, 1990).

Methodology – setting

The subject of our study, a nuclear power plant located in North America, is a notable high hazard organization that exemplifies the challenges mentioned above. The facility's history involves the intersection of leadership, human resource management, external and internal stakeholders, and the sometimes competing tensions of such imperatives as safety and performance. Below, we briefly detail the history of this storied station.

The subject facility has a long and checkered past. The story includes changes in ownership and management groups, employee complaints and allegations of poor safety to the NRC, and being placed on the NRC "Watch List." The result of this turmoil was a firm that created significant financial damage to its shareholders and a lack of trust among its stakeholders. Perhaps due in part to the significant trust issues between labor and management and the uneven relationship with regulators, this NPP has long remained inconsistent in its performance and has struggled to rise above the bottom of industry rankings such as those published by INPO. Not satisfied with substandard performance on a variety of energy related metrics such as capacity factor and core business metrics such as annual budgetary overruns, firm management approached the authors to help reverse this history of uneven and poor performance.

Methodology: literature review and model development

Given this charge, we turned to a variety of literature streams to enact a model of OD intervention. These domain topics included: strategic planning, learning and

knowledge management, strategic human performance management, interpersonal communication, qualitative inquiry and action research, and crisis management. Below, we highlight the key theoretical scaffolding that influenced model design and eventual delivery of this new OD intervention.

The lineage of our OD model can be traced to a previous noteworthy research finding and involves the signal to noise ratio in high hazard organizations. Several academics rightly acknowledge that all major accidents in organizations were preceded by multiple warning signals (Goh *et al.*, 2012). High hazard applications of this observation, including the Bhopal explosion at the Union Carbide plant, the *Challenger* space disaster, and the Three Mile Island (TMI) event, all generated several warning signs that were either ignored or not heeded (Marcus *et al.*, 1989a, b). For instance, at least two phosgene leaks at the Bhopal plant were notable, and predictable, signals that the system was at risk (Marcus *et al.*, 1989b). Roger Boisjoly lobbied for increased and enhanced engineering/management attention of the fateful O-rings that would down the *Challenger* (Mahler, 2009). Finally, similar valve issues that doomed TMI were first found at Davis Besse Nuclear Power Station in Ohio but were not heeded across the industry (Kemeny *et al.*, 1979; Rogovin and Frampton, 1980). Armed with this information and trying to understand this phenomenon, Carroll launched a series of studies aimed at NPPs. One of his major findings was that there is considerable noise, relative to signal, in high hazard industries (Carroll and Cebon, 1990). Not surprisingly, critical warning signals can often get “lost” in this noise. As a result, Carroll offered the following supposition: learning requires noise reduction to increase the ratio of signal to noise in the hope that the signals which define the root of the known part of the failing technology may be detected (Carroll and Cebon, 1990). He also offered a managerial prescription in the form of an imperative. Namely, a good management strategy should attempt to minimize the amount of information flow (i.e. lessen noise) while maximizing the organizations ability to absorb it (i.e. capture signals) (Carroll and Cebon, 1990). Consequently, we sought to advance an organizational change and performance enhancement model that would provide focus, reduce noise, and attune members to important signals.

The noise produced by the high volume of reports cause NPPs to suffer from being overly process oriented, from a technical and operational vantage, which can lead to controlled or constrained learning. With constrained learning, assumptions, mental models, habitual routines, and entrenched interests dominate (Crossan and Hurst, 2001; Pfeffer, 1982). This type of learning is also characterized as single-loop learning (Argyris *et al.*, 1985; Schein, 1992; Senge, 1990) where cause and effect are linear and in close proximity. Running counter to single loop and constrained learning is double-loop learning and open learning. Open learning involves self-analysis, a welcoming of innovation, and exploration of ambiguous causal linkages (Quinn and Cameron, 1983). Typically, it also involves acknowledging and confronting doubt (Schulman, 1993) while increasing awareness and mindfulness (Weick and Roberts, 1993; Weick *et al.*, 1999). Double loop learning is related and well chronicled in the learning literature. Of particular note, double loop learning challenges assumptions, values, and forces the imagination of creative relationships between variables (Argyris *et al.*, 1985; Freidman and Lipshitz, 1992). Moreover, it has been shown that high hazard organizations fall short of generating enough necessary resources (i.e. information, training, and experience) along with diversity of inputs to make good decisions (Carroll *et al.*, 2002a). In addition, learning and the feedback that is

embedded in all learning processes often does not transcend disciplinary or hierarchical boundaries (Carroll *et al.*, 2002a). Making matters worse, NPPs are action-oriented organizations where time for reflection is in short supply; raising the question as to whether the skills for reflection and analysis are well developed in this industry (Carroll *et al.*, 2002a). As a result, we sought to develop an OD intervention model that would invite open learning, spark double-loop learning processes, foster feedback, and knowledge transfer across boundaries and hierarchies, and initiate and foster reflection among leaders.

Another compelling feature that informed our OD model and delivery was an issue common to all organizations, but more aggravated in high hazard organizations. High hazard organizations such as NPPs must reconcile two tensions: exploration and exploitation (March, 1991). Some suppose that the need for high reliability and efficiencies in system processes found in these organizations make learning particularly difficult (Weick, 1987). Several scholars seem to support this notion that NPPs operate in a confusing arena where the tension between maintaining daily control of operations while promoting short, medium, and long term learning to prepare for industry change is at odds (Carroll *et al.*, 2002a, b; Mintzberg, 1988; Weick, 1987; Weick *et al.*, 1999). Consequently, we aimed to develop an OD intervention that would meet the prescription of management scholars that challenge practitioners to exploit current capabilities and processes while imagining and exploring unfamiliar possibilities (Crossan *et al.*, 1999; March, 1991). Juxtaposing the need for control with the need for imagination by encouraging the exploration-exploitation interplay became critical in our OD model development.

In summary, we intentionally and purposefully sought to design an OD tool that would: focus senior managers on the important information by reducing noise and heightening signal strength, encourage deeper learning processes and feedback loops, and drive results in an operational/exploitative manner while promoting some cognitive exploration.

To operationalize our model from these meta theories of feedback and learning and knowledge creation, we pursued three distinct meso constructs to bridge the theory-practice divide. In particular, we explored the integration of strategic planning, executive coaching, and assessment/performance evaluation to develop our model. As we demonstrate how we integrated such organizational changes practices/interventions, it is necessary to also comment on the limitations of each practice as viewed by both scholars and practitioners to better ascertain the contributions of the new model described below.

Our intervention began with embracing the core tenets of strategic planning with some significant departures from conventional practice. We chose the essence of strategic planning for the potential it offers. Strategic planning, when done well, provides focus and direction (Andrews, 1971). It can serve as the azimuth for an individual, team, or organization. Strategic planning also leads to objectives and goals against which future performance are benchmarked (Ansoff, 1965). As such, strategic plans can serve as the launch point for performance evaluations. Through thoughtful engagement, strategic planning can provide organizational purpose and organizational coherence. However, strategic planning is criticized widely and loudly in both academic and applied circles for not working as predicted or promised. Many critique strategic planning for being too unwieldy, too esoteric, too disconnected from practice,

and too long in its time orientation (Mintzberg *et al.*, 1998). One practitioner that we talked to about strategic planning remarked to us:

Please tell me we aren't going to do another 49 page strategic plan that will sit on the shelf and never get looked at – ever. This has been the biggest waste of time in my corporate career. I've never seen a strategic plan successfully integrated to affect or impact performance. We pay these consultants thousands of dollars to come and develop a pretty 80 page strategic plan that is never used and is forgotten about the minute they leave. These are the deadest, most frozen documents here. Please! [with emphasis].

In reality, the problems surrounding strategic planning date back several decades. For instance, in the 1980s, Huff and Reger (1987) published a lengthy and comprehensive review of the entire strategic management discipline. Their analysis identified both strategic planning and strategic decision-making as two of the weaker areas within the larger strategic management discipline. One of their core findings was that strategic planning and implementation needed to improve for the process to remain relevant. The 1990s offered little reprieve from the attacks on strategic planning. Mintzberg in both book (Mintzberg, 1994b) and scholarly outlets (Mintzberg, 1993, 1994a) heavily critiqued strategic planning. For instance, Mintzberg (1993, p. 37) claimed that strategic planning “seemed to lock management in and emphasized control over flexibility” and that “planning works best when it extrapolates the present or deals with incremental change within the existing strategic perspective; it deals less well with unstable, unpredictable situations or quantum change in the organization.” He laments that “planning is so oriented to stability, so obsessed with having everything under control, that any perturbation at all sets off a wave of panic” (Mintzberg, 1993, p. 37).

Mintzberg (1993, 1994a, b) also became among the first to clearly articulate the divide that separates strategic planning from strategic execution. The quote below suggests that planning, rather than execution, becomes the end in itself because it so cumbersome:

Furthermore, while plans can stimulate action, they can also paralyze it, investing so much energy in concocting the future on paper (so simply playing the number game), and draining so much commitment from those who are supposed to act, that necessary actions just do not get taken (leading to the popular phrase “paralysis by analysis”). Then problems are assumed to be solved not because viable solutions to them have been implemented, but simply because they have been approached in systematic ways. In other words, to have it on paper is to have it under control (Mintzberg, 1994b, p. 213).

Mintzberg(1994a) would continue to argue against some of the long-held tenets of strategy as ineffective. For instance, he noted that forecasting and predicting were troubled activities especially given the long range horizon of strategic planning along with the turbulent nature of many environments (Mintzberg, 1994a). Along those lines, he suggested that strategic planning detached strategists from strategy making and that the process was overly formalized, bureaucratic, and time-consuming (Mintzberg, 1994a).

The first decade of this millennium continued to demand change and a re-orientation of strategic planning practices. For instance, in the earlier portion of the decade, scholars again critiqued the actionable nature of strategic planning by suggesting that strategic planning rarely affects key priorities and fails to present guidelines to the relative importance of projects (Beer and Eisenstat, 2000). Furthermore, critics suggested that strategic planning is too far removed from day-to-day actions and that “effective

business strategies are about making choices: deciding what not to do is as important as discussing what to do” (Beer and Eisenstat, 2000, p. 33).

Several years later, some scholars such as Rudd *et al.* (2008) empirically test the strategic planning to performance link which to their admonition has, historically, produced only “equivocal results” (Rudd *et al.*, 2008, p. 99). Interestingly, in re-testing this relationship, they found empirical evidence that organizational flexibility mediated the strategic planning to performance relationship.

More recently, strategic planning came under critique in the public and non-profit sectors. In a plea for organizational change towards strategic planning, scholars such as Poister (2010) argued that non-profits and government agencies would need to re-think strategic planning as an ongoing process rather than a static or episodic process and that the implementation of strategy is and will continue to remain a critical gap that needs closing.

Given these comprehensive and strong critiques from applied and scholarly audiences, we wanted to develop a tool that would address these shortcomings. Specifically, we sought an OD/change management tool or planning instrument that would provide clearer, line-of-sight focus, would be versatile, easy to understand, flexible/living, and actionable. As a consequence, we made efforts to develop a strategic plan that was goal-centric and actionable in nature (Argyris *et al.*, 1985).

After some search of the marketplace, we found an instrument that appealed to our aims, scope, and that addressed many, but not all, of the concerns of the traditional strategic plan mentioned above. Specifically, we adopted a variant of Horan’s (2006) *One Page Business Plan*. In our adoption of this type of plan, it is necessary to detail the differences between our approach and conventional strategic plans. First, we intentionally created our strategic plan to fit on one page. Our rationale was the simplicity and focus that this would provide. Also, and in a related manner, this approach would reduce the “noise” that Carroll and colleagues believed negatively impacted decision-making. Although a possible flaw to this approach would appear to be its oversimplification, there were safeguards in our global process to capture nuance and sophistication that we will address later. Our strategic plan also contained a mix of personal and professional mandates and information. Related to the one page length of the plan, we also put specific boundaries on its duration. Further bolstering our time frame boundary of a single year were the critiques mentioned above along with additional insight that plans three to five years in length were neither flexible nor pliable enough to maintain pace with the rate of change in the environment (Bourgeois and Eisenhardt, 1988; Das, 1991; Fredrickson and Mitchell, 1984). Clients could opt for strategic renewals after a year, which would be akin to a strategic audit. Interestingly, we would later find that our clients would describe this time frame as the proverbial “sweet spot” between exploration and exploitation that March (1991) and others called for (Das, 1991). Furthermore, because of the limited scope and duration of our strategic plan model, all plans occupied a meso space in between the tactical/operational and the strategic. Again, this was a purposeful, intentional decision as to encourage the promotion of actionable, line-of-sight behaviors, which we believed would tie the plan more closely with performance outcomes. While we omit an expansive discussion of the strategic process management (SPM) process here, we provide an exemplar of a finished plan in Appendix 1, Figure A1.

After some data gathering and some consultation from leaders both inside and outside the high hazard industry, we felt that a single page plan would represent a

necessary but insufficient condition to affect learning and performance. Whether the plan was 49 pages or a single page, we quickly realized that an intervention was necessary to ensure awareness, accountability, and focus to the plan. This notion was also captured in our review of the literature above – the execution and the implementation of strategic planning appears to be one of the single largest criticisms in the strategic management domain. Toward that end, we turned to the growing field of executive coaching to address this issue of implementation and strategy execution. After some consultation, we embedded coaching as the second major pillar of our SPM model.

Coaching, at its core, involves helping people to perform tasks (O’Neill, 2007). Others describe it with a bit more nuance to account for the professional development of executives through one-to-one coaching. For example, Costa and Garmston (2002) have developed a technique, termed cognitive coaching, that guides the coached executive to improve thinking and problem solving capabilities. Face validity, almost by its own, is an indicator of its effectiveness. London (2002) reported that there are 10,000 professional coaches, world-wide, and that just shy of 60 percent of all organizations now offer some variant of coaching to their managers and executives.

At least three apparent rationales drive the necessity of coaching. First, there is pressure on executives to transform and alter their thinking in a fast paced environment to deal with present day constraints while driving bottom-line results (Kets de Vries, 2005). A coach is credited with challenging such mental models through inquiry and an outside or etic perspective. Second, as executives climb the ladder, their peer group becomes smaller. As a consequence, the opportunities for questioning dialogue with a peer group become less likely. This is often described as the “lonely at the top” phenomenon. Coincidentally, there is also a perceived greater social risk of engaging in questioning dialogue the higher up the leader achieves. Here, coaches can serve as a vehicle for dialogue and a sounding board for ideas and thought experiments. Finally, the quality of information senior managers and executives receive may be adjusted or altered that inhibit precise and sophisticated thinking and decision-making. For example, some note the rise of “CEO disease” where those around the leader fail to relay accurate, but negative or critical information (Goleman *et al.*, 2002). In summary, executive or managerial coaching is a rapidly growing intervention that increases the likelihood of behavior change (Smither *et al.*, 2005). Importantly, behavioral modification usually follows cognitive coaching; behavior change cannot occur until thought processes and assumptions are challenged and mental models are altered and rearranged (Barnett, 1995).

Not unlike strategic planning, however, the efficacy of coaching has been questioned by both practitioners and scholars. Much of the criticism leveled at coaching is not entirely different than the critiques directed at strategic planning. Namely, some coaching may be too esoteric, too philosophical, or too clinician-like (Cox *et al.*, 2009). Ironically, this type of coaching works against its core definition of helping leaders or executives accomplish important tasks. As we developed our OD/change and performance intervention, we encountered research relevant to this issue. For instance, McGovern *et al.* (2001) found that participants in a coaching relationship were more committed and satisfied when a specific action plan was tied to the coaching experience. Furthermore, Smither *et al.* (2003) uncovered positive personal and professional outcomes when coaching was tied to specific action plans. Specifically, improvement occurred and supervisor engagement was correlated when coaching was

reinforced by action plans (Smither *et al.*, 2003). Others seem to corroborate this notion. Hackman and Wageman (2005) found that coaching works best and performance is most amplified, when coaches coach to specific and salient tasks. Similarly, participants are more interested in solutions to their problems and challenges and find directive advice and solutions appealing (Llewelyn, 1988). As a result of this research, we sought to develop and deliver a coaching and intervention and approach with a couple of defining characteristics. Most notably, we wanted the coaching to be goal focused with a strong performance orientation. To do this, we tightly linked and coupled the coaching process to the one page strategic plan. Secondly, we adopted a focused, and slightly directive, coaching tone meant to enforce accountability to the plan. When we briefed our concept to the client, we received the following response:

I like this. Frankly, I just don't have time for philosophical questions. And I'm not in the mood nor do I have the energy for you to help me solve my own problems over months or years. It's OK. If you see something, tell me to fix it. Show me to fix it. Show me how to fix it. I'm not payin' you to come in here and sit me down on a couch for 90 minutes of reflection. I need coaching that drives performance ... that drives results. [long pause]. My job just may depend on it.

Of particular note, this sentiment and our approach outlined runs counter to long and widely held views that coaching is the responsibility of the coached or protégé and that the role of the coach under this model focuses primarily on guiding and supporting, but not telling (Hutcheson, 1996; Luthans and Peterson, 2003; Peters, 1996). As such and true to effective organizational and management change doctrine, we were intentional, purposeful, and cognizant that we were departing from a conventional and traditional notion of coaching.

With the strategic planning and coaching built now into the model, we explored other domain areas that could solidify or amplify our SPM process. Toward that end, we turned to the literature on assessment and performance evaluation for guidance. We arrived at the assessment stage by first better understanding the coaching literature.

There is compelling evidence that a lack of organizational support can degrade the coaching experience (McGovern *et al.*, 2001; Thach, 2002). Moreover, coaching programs suffer and “die on the vine” when not connected to other OD programs, change interventions, and processes (Anderson, 2001). To ensure that our OD intervention would avoid such shortcomings, we built a formal and informal assessment mechanism into our process. Specifically, we mandated that each leader would brief the status of their plan in a green (on track to meet objectives or goals), yellow (goals at risk), and red (goals not being met) fashion. Leaders would brief their plan, in a formal setting, to both their boss and in front of a targeted peer group. In addition to this formal bi-annual presentation of their plan, there were a multitude of other informal checks in place to ensure continuous assessment. For instance, we mandated that all leaders who owned strategic plans keep them on their person at all times in the work setting. To facilitate this request, we epoxied the plans in a waterproof shell that would allow the plans to survive the harsh conditions of a manufacturing/plant environment. Moreover, both coaches and senior leaders would spot check the status of the plans by varied, untimed, and unscheduled inspections. In short, at any given time on any given day, leaders that owned plans were expected to be able to offer red, green, or yellow assessments of their plan. Finally, all coaching sessions began with a ten-minute assessment review of the plan. This occurred both

in-person and over virtual mediums such as phone, email, or texting. This assessment and performance evaluation step proved invaluable since the plan and coaching were performance focused and goal centered. Since we know that feedback is, perhaps, the most important variable in goal attainment (Locke and Latham, 1990), this would prove a key meta process in our SPM process. Importantly, there were benefits that were unplanned that emerged from the formal presentations that we will discuss in detail in later sections.

Our model emerged after several key activities. Namely, we consulted heavily with practitioners in the field to include exploratory discussions with current and future clients. In addition, we supplanted our field knowledge with the research described above. The core components of our SPM model emerged from this applied and scholarly research. The core components of this model, described above, are Plan, Coach, and Assess (PCA).

Executing the model and intervention: a model in action

Our first step in executing this model began with a needs analysis and abbreviated culture survey report. This was an essential step as it provided a clear understanding of the contextual conditions in which our SPM process would situate and operate. Our needs analysis followed a two-step process. First, we reviewed important documents from key internal stakeholders. For this NPP, that involved reading key NRC documents, reports from INPO, and some internal data from corporate headquarters. We also read published data that chronicled this NPP and industry past challenges. After consuming this research, we arrived on site to conduct a series of qualitative interviews. In particular, we interviewed seven to ten personnel, which included independent contributors along with supervisors and select managers. Our interview protocol is attached in Appendix 2. After, we engaged in sense-making and a variant of axial coding to extract core organizational themes in which our SPM process would embed. From this analysis of the raw data, we produced a four-page needs analysis/culture audit report that identified key organizational problems. This report was briefed in detail to the senior leaders of the station to include a senior executive from the corporate office. The purpose of this presentation was to ascertain convergent validity. Namely, did the clients agree with the performance and cultural gaps we identified? In this case, they did and encouraged us to launch the PCA approach as quickly as possible. To be sure, the thrust of this model was to enhance station reliability.

With that endorsement, we began to build the plans. Unlike traditional strategic planning facilitation which involves a single facilitator and many participants, our approach did the opposite. The authors engaged a single individual in a series of thought experiments, assessments, qualitative questions, and instruments. We began with the senior most executive at the plant, the site vice president, who would later describe the process as “intellectually grueling” and “forcing me to think in ways that pushed cognitive boundaries.” This process lasted approximately four hours. From this, we generated a one page strategic plan for the site VP. We shared this plan with the next level down, the three site directors, for feedback and commentary. Small changes were made based on this input.

After this, we were told that the “focus and alignment really began” as we engaged each individual director in the same process. The only difference is that their plans fed off and cascaded from the Site VP’s plan. Once complete, we shared these plans both

vertically and horizontally for alignment. We then pushed this process down to select managers who used their respective director as the anchor plan to build theirs. The simplicity and beauty of this approach is that as the lower levels of management accomplished their plan, they were by extension, supporting the execution of their supervisor's or boss's plan. We completed these nine plans over a week-long stay at the site. Coincidentally, this vertical and horizontal information sharing helped to reduce one of strategic planning's most serious shortfalls as "blocked vertical communication has a particularly pernicious effect on a business's ability to implement and refine its strategy" (Beer and Eisenstat, 2000, p. 33).

With the plans complete, we turned to the second major meta step in our process – the coaching. Using the accountability model described above, we engaged the leaders in tough, strong, and courageous coaching using the performance strategic plans as the core coaching activity. This involved feedback both horizontally and vertically.

Feedback was formalized in both reports to the Site VP and through bi-annual SPM briefings to senior leaders both at the station and at corporate offices. Given that this was a considerable expense to the site and to the corporation, feedback was provided regarding the issue of engagement. This was important since coaching efficacy plummets when the protégé is not motivated to receive the "gift" of coaching and where it is seen and received as a chore driven by a compliance mentality (Boyatzis *et al.*, 2006; Higgins and Kram, 2001; Kram, 1985). The formal presentation was a 15 minute briefing to the most senior leader available on the red, green, or yellow status of their plans. Coaching prior to the formal delivery of this plan occurred. In total, all coaches received between four and six direct hours of coaching along with one or two hours of virtual coaching per month.

Uncovering moderating variables and contextual conditions

There were several moderating variables that enhanced success of our SPM process – some purposeful, others not. The first major moderating variable was that the organization, in general, and the Site VP, in particular, was what we termed "confidently vulnerable." Specifically, the station and the Site VP were struggling with mediocre, or worse, performance. Consequentially, they were willing, maybe even desperate, to try more creative approaches to performance improvement. Upon reflection, we are unsure if the organizational and leadership commitment would have surfaced so readily if the plant was in a more favorable performance position in relation to other stations within the industry. This is not overly surprising given some evidence that the efficacy of coaching interventions is tied closely to the timing in which they are introduced (Gersick, 1988, 1989; Hackman and Wageman, 2005).

Perhaps, because of this, the command emphasis from the upper echelons of the organization was remarkably high. In particular, the authors coordinated with the Site VP to conduct a program launch meeting for the new process. Here, at this meeting, the Site VP passionately announced his support of the academic/consulting team and his own personal commitment to the process. He then announced in unequivocal and strong language that he expected all managers and above to support this new process. Evaluating this speech from a contingent, situational, or, even, behavioral perspective, his keynote speech was transformational in nature. Simply, it transformed the perception of the organization towards this process "as just another consultant" to a fundamentally different way of doing business. His speech delineated, in rather passionate language, the

difference between committed and involved in this new process. The Site VP clearly stated his expectation that all managers would be committed as opposed to just being involved in ensuring that the SPM process would work, which has been shown to lead to positive intervention outcomes (Ben-Gal and Tzafrir, 2011).

Oftentimes invoking the lexicon of sports metaphors or the analogy to sports coaches, the authors and the site VP easily negotiated some process boundaries and expectations. Of particular note, the site VP often referred and reflected upon the role of a physical trainer, and encouraged us to be intrusive and to ask difficult, penetrating, demanding questions. Furthermore, he demanded that we show up, unexpected, and to investigate any part of the organization we thought needed attention. In essence, a “blank check” was written to allow us unfettered access throughout the organization. Although ancillary to the core of this manuscript, a new construct seemed to emerge and, which we termed confidently vulnerable. The site VP was confident in his own, and his organization’s, vulnerability. His transparency, authenticity, and welcome openness, we believe, became a key moderating variable that furthered progress.

Another key moderating factor towards performance improvement was corporate involvement. Specifically, corporate deferred to the site VP on both the hiring and the engagement of the authors. Corporate did not interfere in this process and even offered encouragement. For example, a senior vice president participated in the formal plan assessments and offered encouragement and resources to promote our SPM process. Thus, it is difficult, if not impossible, to overstate the importance of local and corporate support. Of course, this is important as scholars found that building a coaching ethos from the top down and linking this ethos with briefings and personal development reviews add credibility and power to the coaching experience (Eaton and Brown, 2002; Parker *et al.*, 2008). Coincidentally, we found the HR staff at the facility to be weak. While most HR theorists would view this as a shortcoming, we thought it an advantage. Simply, we were unencumbered by HR process and policy in our enactment of the process. Of course, a strong HR department aligned with our SPM process would surely contribute in a multiplicative fashion. But a weaker, more administrative HR department did not seem to detract from this process.

The consulting team’s diversity of knowledge sets must also be acknowledged. Different classes or strata of knowledge exist (Buchholtz *et al.*, 2003; Dess and Shaw, 2001; Wernerfelt, 1984). For instance, scholars agree that knowledge can diverge along three separate lines. The first global stratification is firm specific knowledge. The second categorical classification is that of industry knowledge. The third, most global, dimension of knowledge is general. The consulting team, due to their various experiences and training, straddled these knowledge bases. Two of the four authors/consultants owned firm specific knowledge, with one possessing a fairly high level of station specific knowledge. A more nuanced classification between these two, however, offers more insight. One had specific, technical, and tactical knowledge[3], but also an impressive general knowledge base through some doctoral studies in leadership and organizational development and behavior. The second of the two had business and executive expertise at the highest levels of a *Fortune* 500 organization. Lastly, two of the authors had extensive academic and research training and was strong in general knowledge and theoretical and empirical research. In *post hoc* analysis, we feel that this diversification of knowledge spurred progress and success in the deployment of the SPM process.

Also, the nature of high hazard industries, in general, and nuclear power plants, in particular, may be well suited to the SPM process that we introduce here. More specifically, the nuclear industry is highly regulated and metrics are required along a variety of performance dimensions. This tied in nicely to our SPM process which forced leaders to derive or develop metrics for both objectives and action plans. Because of the prevalence of metrics and quantifiable measures, plan development occurred more readily.

Finally, all authors possessed either commercial and/or academic OD experience. Employing tenets of the systemic approach to coaching (Hackman and Wageman, 2005), we offered OD interventions, beyond the scope of coaching, in the moment. For instance, we conducted meeting management reviews, generated performance feedback documents, and assisted in talent management to include succession planning. We received immediate, and strong, feedback that these interventions directly impacted performance. Most interventions centered on institutionalizing feedback. For example, after realizing no feedback or performance feedback mechanism existed for the station's most important and strategic event, a planned refueling outage, we generated an end of outage performance feedback form (please see Appendix 3, Figures A2 and A3).

Results and impact

Over a 12-month period, the results are substantive and significant. In Figure 1, we include, perhaps, the most global of metrics of interest, for nuclear power stations: performance in the INPO Index[4].

Readily apparent, the point of inflection coincides with the introduction of our SPM process. Station performance improved in a dramatic, upward trend; moving upward to the top quartile. In addition, included in the INPO Index results is the nuclear

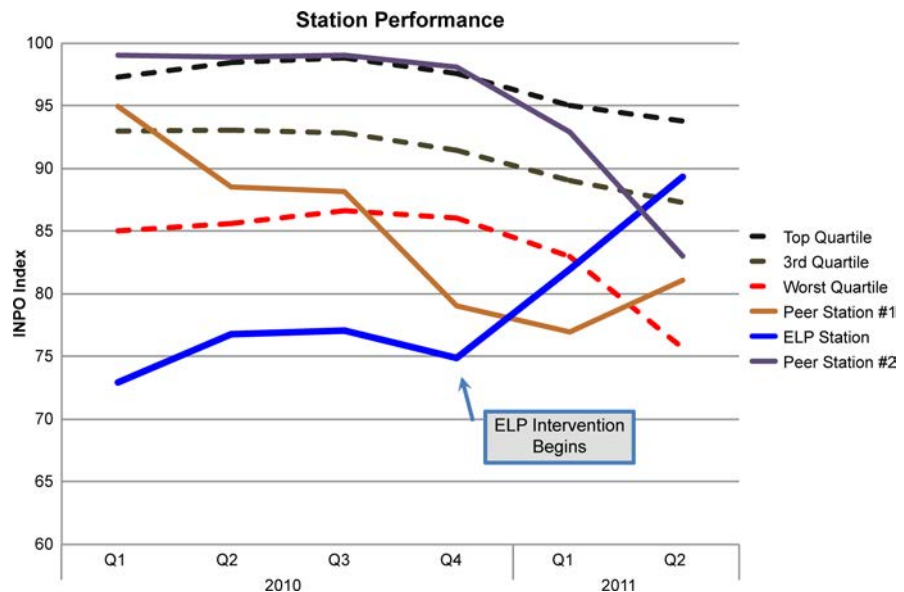


Figure 1.
Station performance

industry's most important metric: safety. Equally apparent is the improvement in safety perceptions. Since the launch of our SPM process, perceptions of safety rose dramatically.

Qualitative feedback mirrors the trends in safety and station performance. Morale and post-performance sensemaking point to the introduction of the SPM process. For instance, one senior manager said in a meeting that the causal variable in station performance was this "SPM process that brought a performance focus along with alignment." Make no mistake, though, the essence of this SPM process is goal attainment. The INPO Index and safety culture report provide some initial, but compelling, evidence of the efficacy of the PCA approach of our SPM process.

Discussion and implications

Although it would be intellectually and practically dishonest and premature to claim victory in the performance turnaround of this high hazard organization, there is promise. The SPM process appeared to address many of the previous limitations in coaching and strategic planning. With its accountability and goal centric focus, our SPM process seemed to more readily influence organization reliability. As we conduct our own After Action Review of the initial success here, several themes surface. First, a major benefit appears to be the overall simplicity of the process. The leadership team embraced the simplicity and parsimony of the process. This inherent simplicity contributed to two outcomes. Notably, communication of the process was easy and commonsensical. Also, there was sentiment that the leadership team could use this process after we left. The simplicity of the process softened the much maligned perception of dependency on consultants and academics. Second, this process, with its limited duration and one page feature, appeared to enhance focus. As mentioned earlier, this is important as it helped reduce "noise" in an industry where noise is the rule rather than the exception (Carroll and Cebon, 1990; Marcus *et al.*, 1989a, b). We contend that our one page plan and the process supporting it stood out in an environment where 30 = page reports are common if not expected. Third, the process is adaptable, flexible, and coachable. For instance, during one of the bi-annual formal briefings, a senior vice president asked a director at the site to change his vision and one plan objective after some new environmental information was received. Because the plan is one page, it was easy to address and adjust. Indeed, this provided evidence that our plan was a "living" document and our process was nimble enough to make changes in the moment. While it is appropriate as scholars and practitioners to view both processes and outcomes with necessary skepticism, there is some strength to our initial conclusions. Notably, for many years, academics and applied audiences have urged the re-thinking of strategic planning. This is one such effort, a simplified approach to strategic planning, that answers such calls. Moreover, most of the criticism regarding strategic planning involves the execution and accountability behind the plan. We demonstrate that when strategic planning is tied with and linked to a slightly more directive coaching approach, execution, along with results, improves. In keeping with the aims and scope of the *Journal of Organizational Change Management*, we highlight the performance benefits when alternative philosophies are considered and when interdisciplinary approaches are embraced. Importantly, our reconceptualization of strategic planning and linking it to a focused and slightly more directive coaching style appears to drive focus and results[5].

That is not to say that this process is without limitation. We identified several. To begin with, we recognize that organizational size and scope may impact the feasibility of this process. In particular, is it realistic to believe that a single page plan would be sufficient at the corporate level? Moreover, a panoply of other stakeholders would likely discount a one page plan out of hand. Another possible limitation to generalizing results may be the setting: the USA. While previous research has shown that cultural differences did not require significant changes to OD processes, we cannot be certain that cultural differences in other locations, in particular in regards to employee involvement, would not hinder the advancements that resulted in this study (Lau *et al.*, 1996). Hence, organizational size, scope, and location impacts may provide boundaries to this process, and still need to be explored. In addition and related to the point prior, it is unclear whether small businesses or emergent firms could use our SPM process. The dominant logic here is that more mature organizations usually have some level of metrics in place. These metrics and success statistics are paramount as they are needed in the Vision, Objectives, and also in the Action Plans section of the strategic plan. Without measurable outcomes, the SPM process is handicapped. Of course, pushing entrepreneurial firms through this process may encourage reflection and cause the development of such performance benchmarks. However, we feel that the SPM process is accelerated when those metrics exist and are close at hand. Lastly, the SPM process may be a bit more of a system than a process. If one meta component of the system is ignored or dismissed, the entire SPM model will likely break down. For instance, if an organization does the plan without the accountability coaching to support the plan, the efficacy of the model will be truncated. Thus, the SPM model should probably only be embraced by those organizations that have the internal will, political capital, and the necessary resources to see each component of the system process through.

Given these limitations, it is appropriate to discuss issues pertaining to external validity; namely, how well can a single case generalize to other settings and contexts. As we explore this question, we also generate propositions and ideas for future research and hypotheses testing. To begin, while the setting of this case study is unique and important, the theoretical rationale that formed the basis of the model is a general response to the almost 40 years of criticism leveled at strategic planning, decision-making, and execution. Put differently, the basis of our model was in response to years for calls to research and calls to action regarding the fact that strategic planning hardly performs as expected (Beer and Eisenstat, 2000; Mintzberg, 1993, 1994a, b; Poister, 2010; Rudd *et al.*, 2008). The same logic applies to the overly theoretic and philosophical approach to executive coaching discussed earlier. While the focus necessary to cut through the “noise” in the high hazard industry and NPPs is imperative, most organizations would welcome, we believe, enhanced focus and alignment toward goals. Of course, the importance of this focus may be more necessary in high hazard industries due to the catastrophic outcomes that could unfold if purposeful attention is not readily and evenly applied. However, all organizations strive to be more goal-oriented and performance focused. In fact, since the introduction of this SPM, we have employed the exact methodology to a million dollar roofing firm, a multi-million dollar paving firm, and a \$65 million construction firm with equal, or better, results. Thus, the model is a general model that just happened to be applied to a NPP in a high-hazard industry. With the singular case study behind us, we open the call to other researchers to extend and test this model with other firms, across settings,

and across industries. Also, other future research may wish to engage in more rigorous, falsifiable, empirical work that involves hypotheses testing (Popper, 2002). Specifically, utilizing control and experimental groups or pre versus post testing to determine causality (Pedhazur and Schmelkin, 1991), scholars may wish to compare firms that use this approach and examine the dependent variable of different dimensions of performance with firms that use traditional forms of strategic planning.

Although we believe that this model will work across settings and industries, high-hazard and otherwise, even if the model was contained to the high-hazard industry, its impact would be meaningful. While the nuclear industry represents, perhaps, the pinnacle of high-hazard technology and risk, there is a myriad of other industries that occupy space in the high-hazard arena. For example, almost all energy related firms operate in high-hazard industry contexts. The BP oil spill from the Deep Horizon rig is a non-nuclear example of what can go wrong when energy firms fail to perform in high-hazard environments. Rebuilding reliability is equally important to such industries as health care, rail and transport, construction, pharma and bio-technology to name just a few. Quasi-governmental and governmental agencies and organizations to include the military and the Center for Disease Control (CDC) and its European counterparts also operate in high-hazard environments and scenarios where reliability is essential for effective performance outcomes. Case studies and qualitative research often involves purposeful sampling for high variance (Seidman, 1998). Our modified case study is illustrative of high variance and the cascading nature of external validity: if this proposed model can work in the most severe and harshest high hazard environments such as the nuclear industry, why would it not work in lesser high-hazard contexts? Of particular note, this case study should appeal across countries and continents. Indeed, the World Association of Nuclear Operators (WANO) aspires to improve safe nuclear operations across the world. In a post-Fukushima world several nations are searching for safer ways to manage risk and to mitigate high-hazard. For instance, China has launched comprehensive safety reviews of all current and future reactors. Thus, while case studies may have their limitations because they are bounded by time and space (Ragin, 1992); that is not to say they are without meaning as case studies are a well-received research qualitative discipline and used extensively for instructional purposes such as the Harvard Case method.

One of our more intriguing findings that arose during this process was the importance of the formal briefing of the plan to senior leaders. We believe that this was significant along several lines. First, there was a professional development aspect. As we coached and rehearsed with the select leaders, we found that their public speaking and impression management skills increased dramatically and rapidly. Thus, this activity became a vehicle to improve these leader's presentation and speaking skills. Second, the formal presentation also promoted vertical and horizontal feedback. Other leaders got to hear what their lateral departments were doing and where they needed help. If this assessment was held individually or in private, areas to collaborate and partner in between departments would have been lost. Moreover, it allowed senior leaders a chance to see where they could deploy resources to help their subordinate leaders meet key components of their plan. In other words, it encouraged and maybe even forced senior leaders to get involved in helping subordinate levels of the organization. Finally, it improved decision-making as information was made public. When progress or lack thereof was made public, it triggered some immediate discussion to identify remedies to

the issue. In conclusion, we felt that adding this bi-annual formal presentation of the plans to colleagues and senior leaders was invaluable in the process. If anything, we would consider quarterly, as opposed to bi-annual, presentations. This conclusion also speaks to the general concern by Mintzberg (1993, 1994a, b) and others that strategy and strategic planning may work best when the “curtain is pulled back” and it is revisited rather frequently as opposed to a one-time process.

In conclusion, executives and leaders are demanding a simple, impactful intervention that can focus their organizations on specific performance goals. Disappointed by the efficacy of conventional strategic planning and coaching interventions, we derived, developed, and deployed an OD tool that is goal centered and performance focused. Bolstered by suggested moderating variables, we found initial, but profound, success in the high hazard world of nuclear power plants. Future practitioners and consultants may wish to validate these results in their own situations and settings employing the methodology contained herein. Given the environmental turbulence, the velocity of change, and the dynamism of external forces, OD interventions aimed at focusing our bounded rationality will become even more important. Although the evidence is preliminary and exploratory, we showcase how an OD tool can be performance-focused and goal-driven in among the most volatile of environments.

Notes

1. At the request of facility management, all identifying information has been removed from this manuscript.
2. Note that this process orientation is aimed at operational demands largely, if not exclusively. There is considerable dialogue questioning whether NPPs are process driven from a learning orientation or a performance evaluation perspective (see Carroll studies).
3. One of the authors possessed a Senior Reactor Operator license which is among the highest credentials one can earn in the nuclear field.
4. For the exact breakdown of the INPO Index, please contact the authors.
5. Parts of this sentence were reproduced directly from the Aims, Scope, and Purpose section of Emerald's *Journal of Change Management* website.

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Corresponding author:

Evan H. Offstein can be contacted at: effstein@frostburg.edu

Strategic Performance Management Sample One Page Plan

Jane Smith
Plant Manager

Franklin Power Station

2012 Plan
Last Updated: 12/15/2011

<p><i>In 2012, move Franklin up one full quartile in INPO rankings through clearly communicated expectations impassioned in a devoted team</i></p>		
Vision		
Mission		
<p><i>Run a great station!</i></p>		
Objectives	Action Plans	Strategies
<p>1. Achieve INPO Performance Index of 98.86 by 12/1/2012; Drive total OSHA Recordable Rate below 0.38 by 12/1/2012.</p>	<p>i. Ensure all High Intensity Training training for Operations and Maintenance is completed by 9/1/2012. ii. Conduct bi-weekly communication meetings with each direct report. Clearly articulate all expectations (email, F2F). iii. Roll out Strategic Performance Management plan to all Direct Reports to include ongoing graphical scorecards and scheduled strategy meeting checks by 1/31/2012. iv. Identify 3 things to stop doing. Improve work-life balance.</p>	<p>A. Build better budget/financial focus. B. Leadership through presence.</p>
<p>2. Reduce and maintain Exposure Outage rates below 145 rem; Non-Outage rates by 8.264 rem by 12/1/2012.</p>	<p>i. Visit the control room twice a week and in the RCA once a week. ii. Meet with RP, Maintenance, Outage & Planning, and Operations managers bi-weekly to discuss exposure plans and goals</p>	<p>C. Build fan base. D. Manage priorities, manage time.</p>
<p>3. Achieve and maintain (station) Capacity Factor of at least 94.47 by 12/1/2012.</p>	<p>i. Conduct formal quarterly counseling sessions (written) and informal coach-as-you-go, aligned with existing performance evaluation system for each direct report.</p>	<p>E. Live PDC (prevention detection correction) model. F. Focus others.</p>
<p>4. Promote or make "Ready Now" at least 1 Manager and 2 Supervisors by 12/1/2011.</p>	<p>i. Position Manager of Fin. & Bus. Services to be more influential/included in all key station activities in 2012. ii. Work with coach to speak the language of winners (Lou Holtz) to positively frame events throughout 2012. iii. Develop Training Manager by sending to one accreditation visit in 2012.</p>	<p>G. Step back; pause; look out. H. Mission first, people always.</p>
<p>5. Engage and implement in at least 2 significant outreach initiatives by 12/1/2012.</p>	<p>i. Engage in regular reputation management activities to include two major industry contributions by 12/1/2012. ii. Conduct 2 external speaking/thought leadership initiatives by 12/1/2012.</p>	<p>I. Nurture follow-through mentality.</p>
<p>6. Drive O&M and Capital budgets to come in on target in 2012.</p>	<p>i. Position Manager of Fin. & Bus. Services to be more influential/included in all key station activities in 2012. ii. Conduct formal quarterly counseling sessions (written) and informal coach-as-you-go, aligned with existing performance evaluation system for each direct report.</p>	

Focus

Be Courageous

Drive Accountability

Figure A1. Strategic performance management sample one page plan

Appendix 2. Interview protocol

- (1) Please give us an overview of your role and responsibilities here at the station:
 - What is your job; meaning what are your chief duties and responsibilities? What are you in charge of?
 - How many people report to you (if any)?
 - Are you good at what you do? How do you know?
 - How would you describe your career path?
 - Do you feel that you are mentored here and that your Individual Development Plan means something?
 - Who do you turn to for professional and strategic advice?
- (2) What percentage of your job is management, and what percentage is leadership?
 - How do you distinguish the two?
- (3) What is the one thing that this station does better than any other facility?
 - Why do you say that?
 - How do you know?
- (4) What is your vision of excellent collaboration and teamwork?
- (5) What would be the benefits for the station and each individual involved to accomplish that vision?
- (6) What can we (leadership) do to move closer to that vision? What are people willing and committed to contribute?
- (7) If you were to speculate, what is the one thing that could cause this station to shut down? (Beside equipment failure)
- (8) The year is almost over. Reflect for a second and tell us:
 - What went well here this year?
 - What didn't go well?
 - What is going to be *different next year*?
- (9) What is your impression of the recent INPO assessment/visit?
 - What was their message?
 - How is their feedback being received by station leadership?
- (10) Fill in the blank here. The industry reputation here is ...
 - What do your regulators (INPO, NRC) say about you?
 - How much time do you spend ramping up for an inspection or audit? Explain.
- (11) What would your peers say about you?
 - Describe two characteristics of businesses/competitors you admire and would like to emulate. (Top decile stations)?
 - Describe three characteristics that you would not like to emulate.
- (12) Give me a leader role model here at the station? What (behavior) do they do that you would want other leaders to model?
- (13) Where do your best leaders come from [open question]? Where do your worst leaders come from?
- (14) How much time do you spend grooming or developing others to manage and lead others?
- (15) Do you perceive HR a partner?

-
- (16) You have one unit of energy or one dollar. Where is that one unit most needed in the organization?

Alternate approach

- (1) What are the areas of your station's performance about which you feel best? What are some of your successes? What else?
- (2) What organizational strengths, specifically, support those successes? What else?
- (3) What are the most important organizational objectives? What is your role in support of these objectives?
- (4) What would be the benefits to the organization when these objectives are accomplished? To you personally?
- (5) What are some specific things the organizations, and you, can do to come closer to meeting those objectives? What else? What help do you need?

End of Outage Performance Feedback Form...page 1

Specific FEEDBACK/COMMENTS/EXAMPLES	
Outage Prep, Execution & Work Quality	1,2,3,4
Outage preps completed on time. No surprises.	
Exercised accountability in accordance with station.	
Accountability Model including proactive communication of successes and challenges.	
Ensured that self and team completed outage work on time and correctly-flawlessly.	
Appropriately responsive to internal customer(s).	
All actions supported the safety/protection of the core.	
Leadership	1,2,3,4
Inspired and influenced superiors, peers & direct reports to meet or exceed highest safety & operational standards.	
Controlled/accounted for and predicated risk variables in all decision making.	
Proactively planned and effectively utilized resources to meet budget and work schedules.	
Asked probing questions. Challenged assumptions.	
Quickly recognized, reacted to and resolved outage challenges.	
Administered timely commendations and discipline where appropriate.	
Teamwork	1,2,3,4
Worked across functions with peers to drive focus, alignment and results.	
Field self, team and peers accountable during all outage interactions and outage performance.	
Worked with peers to proactively anticipate and solve problems.	
Specific FEEDBACK/COMMENTS/EXAMPLES	

(continued)

Figure A2.
End of outage performance feedback form... page 1

End of Outage Performance Feedback Form... page 2

Significant Strengths/Accomplishments/Contributions During Outage:	
Significant Gaps/Opportunities/Shortcomings to Address Prior to next outage:	
Employee feedback: I would have been even more effective if I:	
Employee feedback: My supervisor could help me/my team be even more effective during future outages by:	

Employee Signature: _____ Supervisor's Signature: _____

Figure A3. End of outage performance feedback form... page 2