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Vertical Evaluation Boards: Enhancing Training Ownership by Frank Tsakeres

(Elements of this article were extracted from a panel presentation at the ANS Conference on Nuclear Training and Education (CONTE), Jacksonville, FL, February 8, 2011)

Many nuclear power plant training organizations struggle with strategic alignment between line and training. Sometimes, the alignment between organizations becomes "muddied" by daily competing priorities that create personality-driven relationships, which may result in unwanted consequences. Complicating this "relationship" between the line and training personnel are pressures such as; regulatory actions, extended or unplanned outages, or loss of key personnel (retirement, reassignment, or external job opportunities). Vertical Evaluation Boards (VEBs) is an effective technique to rapidly create alignment from site executives through the line to training management.

First, what are the VEBs? They start with a comprehensive assessment of the discipline's training program. The assessment is typically conducted by the line training program owner (Curriculum Review Committee (CRC) Chair) supported by the lead discipline training representative. The assessment is conducted using a process

Cont. on Page 2

Inside this issue:

Nuclear Game Changer by Tallman Whitler

Consider this scenario: You've just been hired as SVP or Plant Manager. This is the opportunity you have been seeking. Your plant has a high number of NRC allegations with a number of INPO organizational AFI's. Your experienced workforce is starting to retire and is being replaced with a new generation of workers. Training is starting to show signs of ineffectiveness because of changing workforce. Budgets are tight. The plant is experiencing a lot of equipment failures causing your plant to be offline; thereby drawing the attention of the regulators and upper management. The plant management team has just changed. The organization has so many new people working that it might as well be a new organization. You have to address numerous complex issues in a timely manner. To add to this, INPO has distributed SOER 10-2, "Engaged, Thinking Organizations" which says you need to have a "thinking" organization. So how do you use this SOER to help you solve your plant issues?

To address this SOER and develop a 'thinking organization' you consider two questions, "Am I prepared to deal with it? Can I win and succeed by doing what the industry has done in the past?" Finally, you come to the conclusion that you have to change your organizational approach to address not only the SOER, but the issues facing the plant. It is the "thinking" part of this SOER that is going to change your plant as well as the industry. Your organization is going to have to teach employees how to think. Also, in addition to hiring and promoting employees with the technical skills you need to find people who can teach and manage people as well. That's the game changer.

Cont. on Page 3

Vertical Evaluation Boards: Enhancing Training Ownership

Cont. from Page 1

of tracking a single task through the program including; analysis, objectives, lesson plans, instructional materials (i.e., simulator guides, lab guides, student materials), test items, and OJT qualification guides. Deficiencies and enhancements identified during the assessment are documented in the station's Corrective Action Program. In addition, the assessment provides a written "snap shot" of how the program applies the systematic approach to training (SAT), with an emphasis on results as compared to accreditation objectives (Overall Training Program Health). The assessment results and findings are presented to a formal board comprised of senior site managers and the training manager.

The objectives of a VEB include the following;

- Accelerate the learning of the CRC Chair with respect to the training process/SAT and program processes, successes and deficiencies.
- Foster a closer partnership between the committee chairs and their training counterparts.
- Provide training program specifics (e.g., training process/SAT and program processes, successes and deficiencies) and learnings to the senior team in preparation for the accrediting board.

The VEB contains two distinct phases; first, a vertical slice of a performance issue that assesses the task through effectiveness review and, second, the overall training program health by each accreditation objective. The VEB focus includes the following items: how training is being used to improve performance (especially human performance (HU)); whether incumbents are able to competently perform the task the first time; determining if the SAT process being used to develop program output and are training materials technically accurate & complete with consistent quality; and whether the training program accurately reflects entry-level requirements.

The VEB requires substantial preparation, including reviews of; the training program description, applicable training processes and procedures, task list (with DIF results), task-to-training matrices, and, the most critical preparation action, selection of the performance improvement example. Once a VEB task is selected, handouts are prepared for each VEB member including the task list, task-to-training matrix, learning objectives, classroom lesson plans, lab exercise guides, OJT training materials, evaluations, feedback, and qualification guides. The VEB review provides an insight on how the training program is following the SAT process from origin of the training request/need through evaluation and effectiveness determination.

All of these materials are evaluated with respect to the thoroughness of the SAT process and evaluation of the plant results of the training. The assessment should prepare answers to 'five questions deep' to prepare for the VEB presentation. Examples of questions to consider include the following: for the performance gap – 'What does *good* look like?' and 'How do you measure it?' Questions pertaining to the task to training matrix include: 'Does it reflect where the task is covered in the training program?' and 'Does it reference the standards used in the plant, such as procedures?'

A comprehensive list of questions to be considered exists but is too lengthy to include in the newsletter.

An example at one VEB, a performance gap identified that quality and depth of analysis of Immediate Operability Determinations (IOD) was poor. This gap needed urgent attention due to the regulatory nature associated with station operability and aggressive action needed to be taken. One action included intervention train-

Cont. on Page 3

Vertical Evaluation Boards: Enhancing Training Ownership

Cont. from Page 2

ing. An industry expert reviewed a sample of IODs and found that while operability calls were correct, the quality was poor (20% fully Acceptable, 40% Marginal, 40% Unacceptable (poor specified safety function, no mission time, insufficient basis statement)). The desired state was IOD quality (key attributes) should be >80% with no missed operability calls. The performance measurement included a monthly IOD review with a performance indicator containing quality scores and results fed back to the IOD preparer and training committee. Initial data demonstrated improved performance on IODs following the targeted training intervention**.**

Following the vertical slice review, the VEB is focused on a review of the training program health by accreditation objective. In some cases, training performance indicators have been changed as a result of this critical assessment. Training program health is rated by the line owner with input from the training representative. This assessment is then critically reviewed and challenged by the VEB members based upon the effectiveness of the training results obtained from in-plant performance of training program incumbents. A major benefit arising from the VEB experience is that the station's executive leadership becomes acutely familiar with programmatic issues and their specific actions in a 2-3 hour VEB.

Cont. on Page 4

Nuclear Game Changer

Cont. from Page 1

Here are a few suggestion and tips to help you move forward.

Most people in the nuclear industry are technically oriented and tend to turn things into a project. The first suggestion is to consider the best approach to the issue. Apply the principles of SIB-KIS (See It Big-Keep It Simple). You should communicate only simple, core management principles to your team, not details. Accomplishing this change is not hard, but it is a change: and change creates fear of the unknown.

The first, and main, step is to communicate to your organization that it is going to become a 'teaching' organization. To support this, your managers will need to be involved in teaching. In doing so, you have just made the unknown, known. This expectation will have a ripple effect throughout your entire organization. This principle becomes a vision that everyone in your organization can align with and follow.

To accomplish this "teaching" vision, you will probably need to train your management team in an approach that uses employee development as its basis. Then you evaluate their ability to adapt to your new "teaching" directive. This isn't difficult or expensive to accomplish, it just requires the knowledge of what success looks like and how to accomplish it.

Once you have established this vision as a priority management method, the path to accomplish the goal will fall into place for you. Here are a few suggestions of actions that might be on the path;

1. Evaluate hiring, promotion, and succession planning processes to identify the needed management skills of potential new hires.
2. Assess and evaluate the current management team to determine their teaching abilities.
3. Provide a management model based on employee development and teach your team how to use it.
4. Adapt your performance management process to accommodate the new "teaching"
   principle.

Cont. on Page 4

Vertical Evaluation Boards: Enhancing Training Ownership

Cont. from Page 3

Summary

Vertical Evaluation Boards is a technique that improves management knowledge of the training programs. With a focus on performance gaps and the strategic use of training to improve plant performance, VEBs quickly aligns station leadership with the effectiveness of their training programs.

The committee chair (Line) becomes very knowledgeable about the specifics of their training program, resulting in more effective CRC meetings. In addition, the station's executive leadership that are typically Accrediting Board participants obtain an accurate picture of current training program health using this intrusive and participative method. All participants become more aware of the need for educationally sound training materials. This technique is being used at some power stations at least two times per year for each accredited program to ensure that CRC training committee chairs maintain a level of knowledge and provide current performance improvement examples in using strategic training interventions.

Nuclear Game Changer

Cont. from Page 3

5. Develop a metric to evaluate the application of the new management skills
6. Leadership development courses have to be evaluated to ensure the new principle and management model is communicated
7. Implement a dual promotion path for people in technical or management positions.

I have observed over the past 25 years that there are a lot of technical approaches in organizations, but few that use teaching as a basis for management. This "teaching" SOER is going to change management approaches used at the plants.

So, you might want to start on a plan to establish a teaching organization as soon as possible. This effort from INPO is not going to go away and will become the expectation of the industry. The industry is going to need good nuclear managers that can teach and develop personnel. These teaching managers will become sought after and coveted. If you lack any of these managers/teachers, you will have take the time and absorb the cost of developing them.

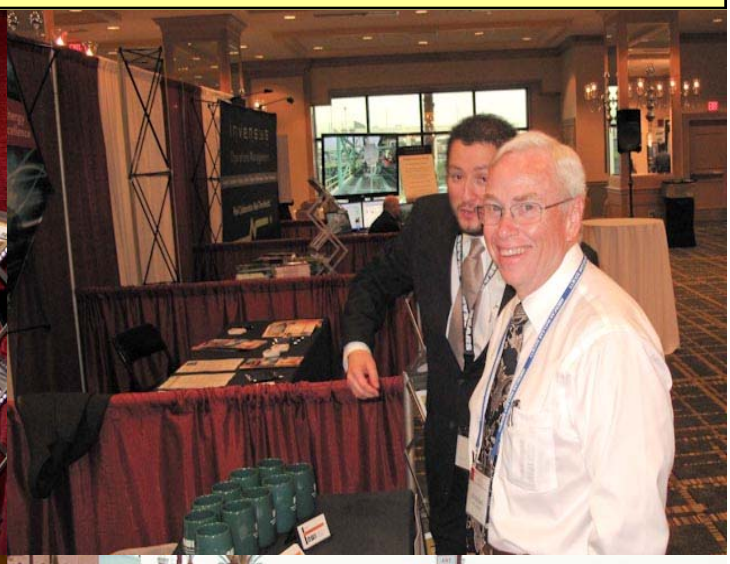
You don't need focus groups of employees to tell you what the fix is or take time to install this approach into your organization. Following Rule #1 of management, "Employees do what a manager wants or allows." This is simply a leader's decision…your decision. You have to tell your team that, "I will have a teaching organization!" Just making this statement known to all will change the direction of your organization.

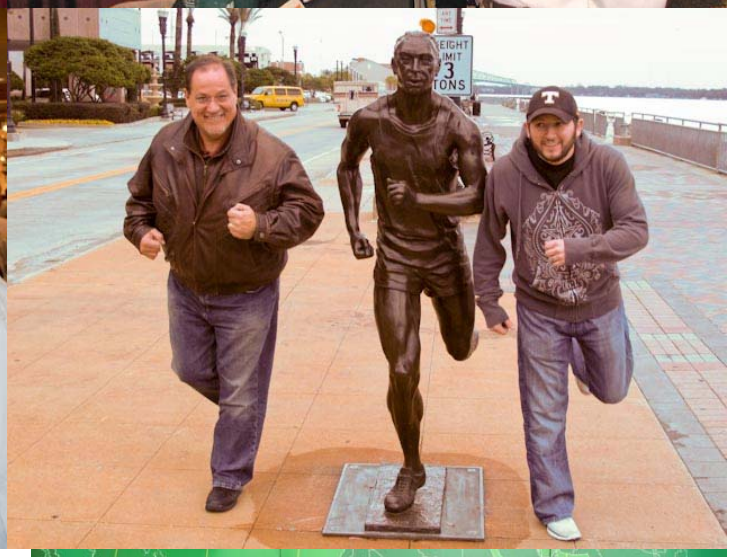
The path to success begins with having a management model in your back pocket. The model will help you identify the type of manager you are looking for and provide you with the path to implement and sustain your approach. This management model becomes the guide to developing a teaching organization and accommodates SOER 10-2.

NWI team of experienced professionals can assist you in every part of your successful implementation of a plan. We have the expertise to accomplish your directives and can tailor them to meet your needs.

NWI provides a Leadership Assessment Program (LAP) that provides a customized approach to meeting you leadership needs. An example of its uses is described in the 2008 Spring NWI Newsletter.

Images from CONTE





Plant Workforce Changes – Are we ready?

(Excerpts of data provided at CONTE 2011 by John Lindsey, Ed Baker, and Scott Madden)

Basic workforce supply story is unchanged.

- 50% expected to retire next 5-10 years
- 45% of utility employees over 48
- 25% of utility employees over 53

Workforce demand could break an already strained system.

- Training infrastructure
- Existing operations

Huge gains are in anticipated generating capacity creates workforce demand worldwide

- >73 GWe new nuclear generation by 2020
- 511 to 807 GWe in place in 2030 (37% to 116% more than in 2009)

Sudden Leader Loss Leaves Firms in Limbo

Joe Light, Wall Street Journal (01/24/11)

More than 20 percent of senior managers say their companies are "not at all prepared" for the sudden loss of a key member of the company's senior management team, according to a newly released December survey of 1,098 senior managers by the American Management Association. "For the last few years, companies have been in survival mode and losing sight of the things they need for the future," says Sandi Edwards, a senior vice president at AMA.

As the stock market comes back, companies may have to face more retirements by senior executives who stayed on due to the severe hit their retirement savings took during the recession.

About 39 percent of managers surveyed said their own company's leadership pipeline is inadequate, compared to only 10 percent who described it as "robust." David Larcker, professor at Stanford Graduate School of Business, says firms often acknowledge that leadership development is important but rarely back that up with action. He notes that compensation programs, for example, rarely factor in how well the manager has planned for his own succession. Larcker adds that even when a succession plan is in place, some companies find they are not really committed to it when it comes time to replace a leader. "You need to make sure people believe in the plan. You don't want to go months without senior leadership," he says. According to the AMA survey, about 34 percent of managers said senior management often ignores the management-succession plan and recruits from the outside instead.

A message from the NWI Professionals…

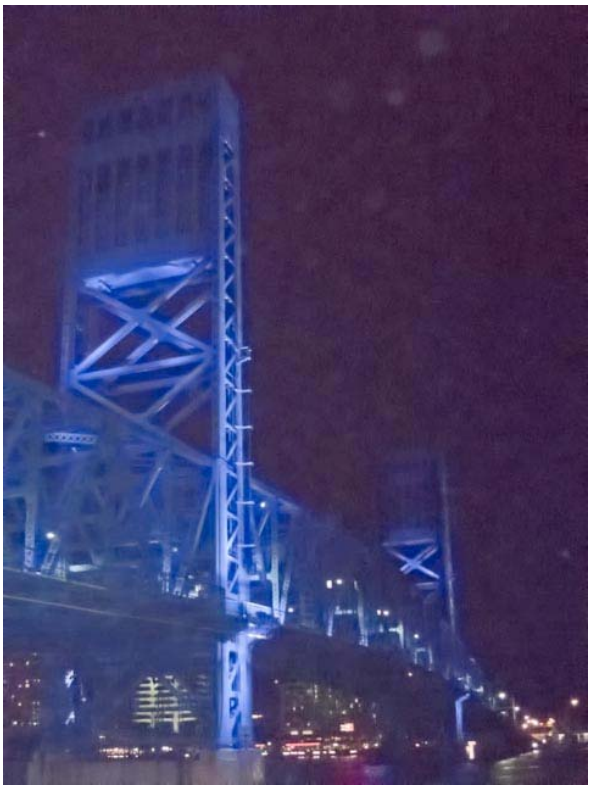
We hope that you have found this newsletter interesting, useful and informative . Leadership is a critical piece of the utility business, especially in these turbulent economic times. Leaders who can develop an organization to move into the future in a sustained manner will be in great demand.

These leaders not only have to lead the company in the current times but will have to develop the next generation of leaders. The development of the new leaders is the bridge to the future. It will be important to not only teach the new leaders the business skills but also teach them how to teach and develop the next generation. As Tallman discussed in his article, developing this ‘teaching organization will provide the sustainability part of the formula.

Another critical issue is to prepare a ‘pipeline’ to develop the future leaders. Part of this pipeline the is the leadership development program. This program coupled with a maintained succession plan is another part of the solution for the future.

We also hope that you enjoyed the images captured at the 2011 CONTE conference.

If we, at NWI, can assist you in these efforts, contact us.



4 Innovation Lessons from a Submarine Sandwich

Fertman, who's been with Subway for 29 years and is credited with much of the chain's growth, worked alongside store employees baking bread, chopping tomatoes and making sandwiches for customers. He told media that the experience revealed some "terrific best practices" that he plans to share throughout Subway. What can small businesses learn from Fertman's experience?

1. There's room for innovation everywhere.

You may think that your small business is too "ordinary" for innovation. But it doesn't get much simpler or more basic than a sub sandwich shop. If there's room for innovation when it comes to placing cold cuts on bread, there's room for innovation at your dry cleaning business, accounting practice, retail store…you get the idea.

2. There's inspiration everywhere.

You may think innovation requires reading lofty books, taking expensive seminars or going back to school. As Fertman's experience shows, often the best way to innovate is to look right in front of you. How is your company doing things now, and what can it do better?

3. There's innovation in everyone.

Have you ever tried to brainstorm by yourself? It doesn't work too well, does it? Ideas multiply faster the more people you have involved. Get everyone in your company thinking about innovation, and you'll get more ideas. And by everyone, I mean *everyone*. If you want to make your mailroom more efficient, don't just get your top managers talking about it. Get your mailroom guy involved. While you're at it, pick the UPS driver's and mail carrier's brains, too.

4. Innovation is 99 percent observation.

Fertman didn't go into the situation pushing new ideas on the employees. His role was simply to watch, listen and learn -- to observe. As entrepreneurs, we naturally try to direct and control situations -- that's part of our nature. When you're seeking to inspire innovation, however, sometimes you need to sit back, keep your mouth shut and simply observe.

NWI Associate News

⇒ Bill Cheever has been supporting EPU by providing project management support.

⇒ Ernie Harkness has been supporting Entergy's Nuclear Safety Review Board and INL.

⇒ Chris Lindbeck, Dick Cole and Keith Deck had successfully supported PPL Susquehanna's Operations training recovery.

⇒ John Thomas, Dave Knox, are continuing to assist SONGS in Maintenance and Technical training improvement initiatives.

⇒ Marv Engen is supporting Prairie Island in EPU engineering projects.

⇒ Rick Westcott and Frank Tsakeres have been supporting causal analyses for Ameren's Callaway Nuclear Station.

⇒ Roger Armitage is supporting Callaway's Technical Training program assessments and enhancements.

⇒ Dan Slater is assisting APS's Palo Verde (PVNGS) for the procedure upgrade project.

⇒ David Hendrickson has been supporting administration and marketing improvement initiatives for NWI.

⇒ Terry Johnson and Mike Gettle are providing Quality Assurance support at Indian Point 3.

⇒ Paul Kirker is providing Quality Assurance Support at Grand Gulf.

⇒ Rick Westcott is providing Quality Assurance Support at Palisades.

⇒ Bill Lindsey, Bill McNeill and Frank Tsakeres have been assisting Robinson training.

⇒ Tim Bostwick and Richard Miller are providing CAP/PI support for Progress Energy's Robinson Nuclear Plant.

⇒ Frank Tsakeres has been supporting Exelon Nuclear Partner initiatives.

NWI Products And Services

Spring 2011 Volume 6, Issue 2

NWI Consulting, LLC is a professional consulting firm specializing in power generation performance improvement services, specialized learning interventions, computer-based training, organizational development, accreditation renewal/recovery, and professional staff augmentation. NWI has a broad portfolio of U.S. and international clients in the electric generation industry and is headquartered in Knoxville, TN. NWI's power plant services includes supporting such areas as Operations, Training, Outage Management, Nuclear Oversight, Maintenance, Radiation Protection, Chemistry, and Emergency Preparedness. NWI has assisted clients in other, more specialized efforts including Leadership/Management Development, Executive Coaching, Conflict Resolution, Multi-Discipline Assessments, Root Cause Analyses, Performance Improvement, NRC 95-002 & 95-003 and Preparations and specialized Safety Analysis (50.59).

The following key activities are being conducted by NWI professionals…

- Ameren's Callaway training and causal analysis
- Palo Verde 's Procedure Development and SGR Projects
- DC Cook Training and Human Performance Support
- TVA Nuclear Power Group—Technical Human Perf. Support
- Xcel's Monticello & Prairie Island EPU Project Support
- Entergy—Nuclear Oversight/Safety Review
- Exelon Nuclear Partner initiatives worldwide

Thank You

We wish to express special thanks to the following clients for making NWI a preferred consulting company.

- **AEP's D.C. Cook Nuclear Power Plant**
- **APS's Palo Verde Nuclear Station**
- **Ameren's Callaway Nuclear Plant**
- **Entergy's Grand Gulf, Palisades, and Indian Point 3 stations**
- **SCE's San Onofre Nuclear Generating Station**
- **Xcel Energy's Monticello and Prairie Island Nuclear Generating Plants**
- **Exelon Nuclear Partners**
- **Progress Energy Robinson Nuclear Plant**

Editor: Frank S.Tsakeres, NWI