Is your organization losing the ability to effectively challenge technical issues, conclusions, and decisions?

When hundreds of engineers were asked if they had ever hesitated to challenge a technical topic because they thought others were more knowledgeable or experienced, the answer was an overwhelming, YES.

As organizations get smaller and less experienced, we are losing the ability to effectively challenge technical issues, conclusions, and decisions to ensure safe and reliable operations, and our training strategies are not addressing this gap.

The ability to develop proficiency in identifying "what," "how," and "when" to effectively challenge technical topics can take decades and, unfortunately, this ability is often learned from experiencing the culmination of multiple impactful issues.

Would your organization benefit if you could accelerate the proficiency of engineers, operators, and other key personnel to effectively challenge technical issues, conclusions, and decisions to ensure safe and reliable operations (without having to experience all the impactful issues)?

Providing your workforce with the tools and proficiency to create and foster a work environment with healthy, effective technical challenges improves the quality of products, the quality of decisions, and quality of life.

Presentation Feedback

(from Southern Company and Enercon)

"I wish I had this presentation 15 years ago when I entered the nuclear industry."

"One of the best training sessions during my time at the plant."

"I am a newer engineer, and this training was invaluable to me."

"This presentation gave me more confidence to challenge conclusions even if I am not experienced in the area."

"I recommend all engineering supervisor, leads, and managers attend. Also, operators would benefit as well."

"The presentation was great. It was informative and will make you open your eyes to critical thinking, as in what questions should be asked and what path to follow."

"As a new engineer, the presentation helped seat a foundation for critically thinking about future problems."

"The presentation showed how to apply critical thinking principles into real plant events. It took the idea out of the abstract and brought it to the practical."

"The instructor's approach to the training was well suited for the topic."

Who Can Benefit from Attending?

- Newly Hired Engineers
- Experienced Engineers
- Site and Corporate Engineering Leaders
- Maintenance Specialists
- Operators
- Operations Leaders
- Plant Health Committee Members
- Senior Site and Corporate Leaders

Benefits

Teaches participants how to:

- identify the critical parameters associated with technical products, decisions, and conclusions.
- focus on the key information to challenge regarding decisions and conclusions.
- find and validate implied assumptions.
- use consequence-bias to determine the sense of urgency for action.
- address a consequential equipment failure that has no conclusive, likely or "smoking gun" cause.

Instructor Biography -

David Czufin is a degreed mechanical engineer with more than 40 years of experience in engineering, maintenance, work management and operations management at BWR and PWR facilities. He has Senior Reactor Operator certifications for both BWR and PWR facilities.

He has worked at four different utilities and four different nuclear plants throughout his career. His positions ranged from a Systems Engineer to Senior VP of Engineering and Operations Support. At two of the nuclear plants, they achieved first time ever breaker-to-breaker runs, with one plant setting world records for the length of the breaker to breaker runs.

He also has extensive industry experience. He served as the chair for the BWRVIP, EPRI PWR PMMP, SMR Working Group, and the vice-chair of the BWR Owners Group. He has been an INPO Industry Advisor for three different INPO evaluations and is an instructor at the INPO SNPM class. He led the industry in the development of the INPO Technical Conscience Principles. Over his career, he has been onsite and provided support to 40 different nuclear plants in the US and Japan.

Contact Information –

David M. Czufin
Czufin Consulting, LLC
2917 Hydrangea Place
Wilmington, NC 28403

815-342-4565
czufin@gmail.com

www.czufin.com

Training Options –

The standard training is based on twelve different experiences that are captured as case studies. The instructor "sets the stage" for each case study scenario and then presents the case study content to the participants. For each scenario, the participants are given time (in groups or individually) to identify their recommended response. After the participants discuss the responses, the instructor provides feedback and the key takeaways for the scenario. The takeaways from the case study scenarios are reviewed and a handout with all the takeaways is provided to the participants at the end of the presentation.

The presentation materials are copyrighted and not provided to the participants, but there is an option to purchase the presentation material along with student workbooks and mentor handbooks for your in-house training program to cultivate a *Critical Mindset for Healthy Challenge*.

Critical Mindset Training -

Based on over 40 years in the nuclear power industry, the instructor uses personal experiences to teach participants how to think differently when engaging in an issue, decision, or course of action.

This training helps participants focus on how to interact to ensure effective ***Problem Identification & Solution*** and ***Risk Decision Making*****.** The case studies include - converting assumptions into facts; identifying what & how to challenge; putting eyes on the problem, leveraging consequence-bias, and much more.

Each participant receives handouts with the case study key takeaways as well as techniques to develop a sound technical position for future reference and use.

Over 450 utility and design engineering firm engineers and engineering leaders have attended this training and they have provided overwhelmingly positive feedback.

(Rev. B)