Building the future of energy
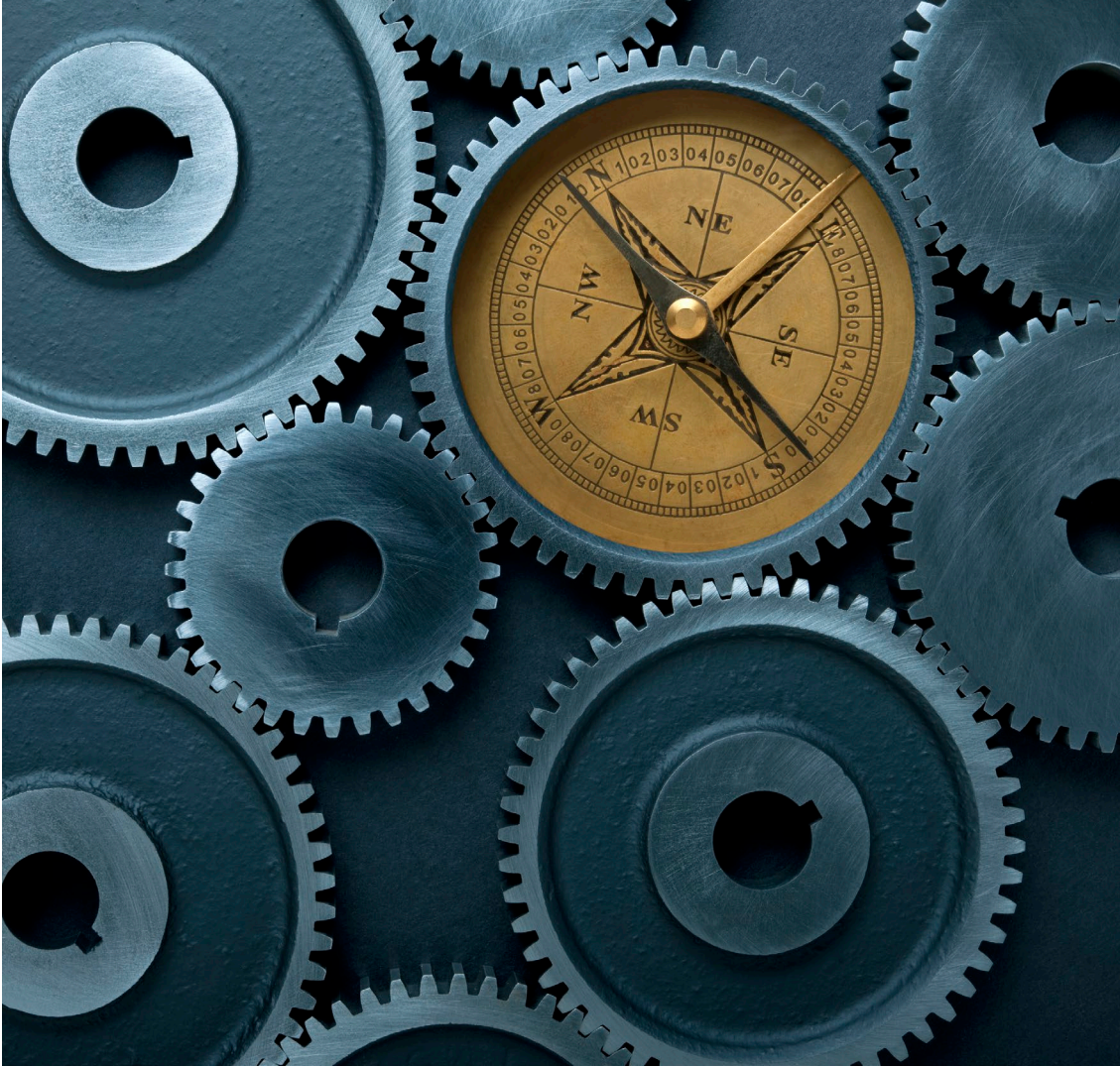
Plant Vogtle 3 & 4

Southern Company

QA Key Lessons Learned

- Clarity in Coordination of QA Programs

- Appropriately Focused Oversight

- Responsive Issue Management

- Utilization of the Corrective Action Program

- Timeliness in Documentation

Clarity in Coordination of QA Programs

- Recognizing the complexity that multiple concurrent QA programs can introduce, Southern Nuclear proactively established interface documents. These documents clearly outlined the responsibilities of each major organization across different QA criteria, fostering collaboration and ensuring that strategic objectives are met efficiently.

- Southern Nuclear placed an emphasis on the importance of striking a balance between paper documentation reviews and field verifications. Strengthened by guidance documents and thoughtful surveillance plans, assessor activities became more targeted, better managing vulnerabilities and elevating real-time oversight.

- Organizations can become over reliant on paper documentation reviews due to an inherent reluctance to perform surveillances in the field, but that can result in inadequate effectiveness of the oversight function.

Responsive Issue Management

- Placing a higher priority on the prompt resolution of QA Findings is a significant leadership behavior that should be prioritized on a nuclear project.

- Delays in the correction of programmatic issues are detrimental to quality work, so identification of issues but not prompt resolution is not a healthy demonstration of QA principles.

- It can be effective to hold weekly management reviews of open QA items, which effectively reduces delays in addressing them, illustrating a commitment to dynamic and responsive quality systems. Periodic status meetings with the most senior-level leadership demonstrates the commitment and support at the highest levels to ensure quality is instilled in the project.

Utilization of the Corrective Action Program

- The Vogtle Project saw a transformation in the approach to deviations whereby all issues shall be recorded through the Corrective Action Program (CAP). This enhanced transparency and accountability in the QA process.

- Ineffective use of the corrective action process or insufficient identification of conditions adverse to quality undermines the effectiveness of the entire Quality Assurance program, and steps should be taken to avoid ineffectiveness in this area.

- The practice of QC identifying issues in pre-inspections and not capturing the issue in CAP, QC misapplication of NEI 08-02 to allow work to be considered in-progress until the final QC inspection and QC inspection reports being viewed as an alternative method for identifying conditions adverse to quality (NEI -08-02) would be expected to result in QC issues not being entered in CAP and low visibility of quality issues identified by QC.
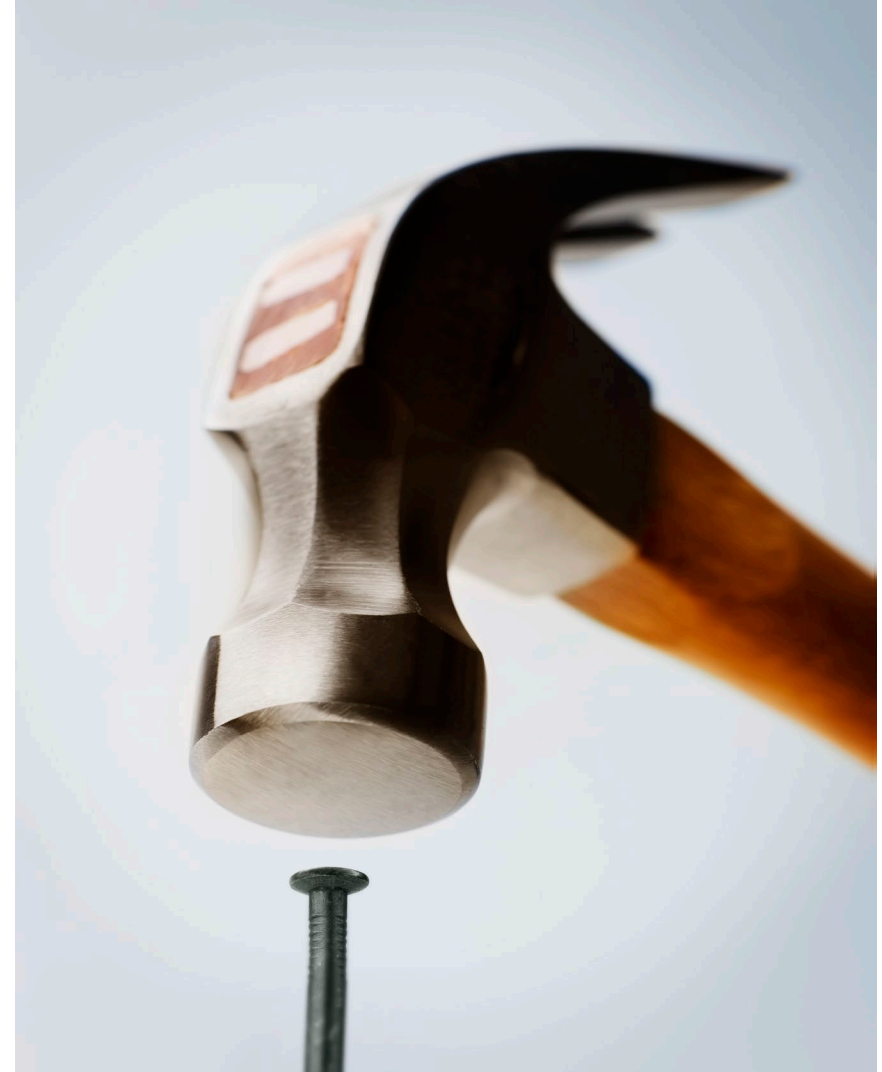
Timeliness in Documentation

- Streamlining documentation processes to emphasize real-time recording ("sign as you go") was paramount in the development of sufficient quality records, ensuring that work performed and verified was immediately and correctly captured. Future projects should ensure this is a focus area of contract development, execution by the construction entity, and part of a focus area of future audits and surveillances by the Quality organization.

- The consequence of not doing this can result in the need to <u>re-perform or re-verify</u> work if personnel have changed or the next activity in the work instruction is delayed for any reason. Re-performance or re-verification <u>can sometimes even be impossible</u> due to changes in accessibility to the area of interest.

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