Corrective Action Program (CAP) Monitoring
The methods used in the Brunswick Operating Experience area to monitor the quality of Corrective Action Program (CAP) activities are unique and effective. Significant adverse condition investigations and root cause analyses are critically reviewed and given a score based on quality of the analysis by the Self Evaluation Unit. Specific criteria are evaluated using a quality review sheet. Also, 100% of the completed significant adverse condition investigations are reviewed for quality. All Self Evaluation Unit staff members participate in this quality review which enhances the process since the staff has the benefit of various backgrounds and experiences (operations, maintenance, environmental/chemistry and training). Feedback on the quality of these investigations is provided to the approving supervisor and investigator.

The scores of these quality review sheets are an element of the CAP Programme Strength Key Performance Indicator (KPI). The KPI is weighted with an emphasis on quality (60%). The other 40% measures timeliness standards. The timeliness standards are:
- Significant Adverse Condition Investigation: 21 days
- Adverse Condition Investigation: 30 days
- Corrective Action to Prevent Recurrence (CAPR): 90 days
- Corrective Action (CORR): 120 days

Quality and timeliness goals are established for the completion of Significant Adverse Condition Investigations, Adverse Condition Investigations, Corrective Actions to Prevent Recurrence, and Corrective Actions.

Formal effectiveness reviews are conducted after corrective actions have been completed to determine the effectiveness of the corrective action plan.
CAP Program Health Indicators are used by the Brunswick Nuclear Plant (BNP) management team to improve CAP activities. Timeliness standards are reviewed weekly at the BNP Leadership meeting and actions are taken to focus on the completion of investigations and corrective actions. This indicator is reviewed by the Brunswick Self Evaluation Team at their routine meetings. The CAP Program Health Indicator is updated monthly and included in the KPI report generated by the Director of Site Operations and provided to the Nuclear Generation Chief Nuclear Officer and Senior Vice President. These measures have focused attention on the quality and timeliness of the corrective actions leading to better performance in this area.
The corrective actions from significant events are managed in a manner that enhances effective implementation and close-out.

Corrective actions for significant events are accepted at senior management level and forwarded to an independent body (SSQ) to manage and track. A main action list ('mother'- A form) is created; the actions are then split into 'daughter' B forms that are managed at department level. If lower level actions are required, the B forms are then split into C forms. All of these forms are managed by an owner for the action as well as a person responsible for driving the implementation. Once this person has implemented the action and updated the database, the responsible person will verify the close-out and sign off on the action. This process is repeated for all the actions originating from the A form. The B forms are independently verified and closed by the safety engineers. Once all actions are complete, the head of SSQ will ratify the safety engineer’s close-out with a final close-out review being performed by senior management.

The benefit of this process is that the verification of close outs of important actions are done at different levels of the organization with independent oversight ensuring effective implementation, thus improving the safety performance of the plant.
The plant has developed a unique electronic tool for trending of the corrective action programme data that does not require any manual manipulation/sorting. The tool provides a mechanism for consistent reporting using defined templates. The database is user friendly and includes live time electronic guidance to further assist the user. Trending can be easily performed at various levels from the macro process down to department level.

**Examples of Trend Data Graphs**

**Number of industrial safety findings**

**Breakdown of industrial safety findings by risk**

**Breakdown of industrial safety findings by department**

**Benefits:**

This tool enables plant departments and process owners to have easy and prompt access to trends in relevant areas. The stakeholders can proactively identify and manage issues before they become actual discrepancies and deviations. The plant has developed and implemented this tool independent of the fleet to help them improve in trend analysis. This process has resulted in measurable improvements. It has been assessed by the local French regulator as ‘meaningful and promising’.