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Root Cause Analysis

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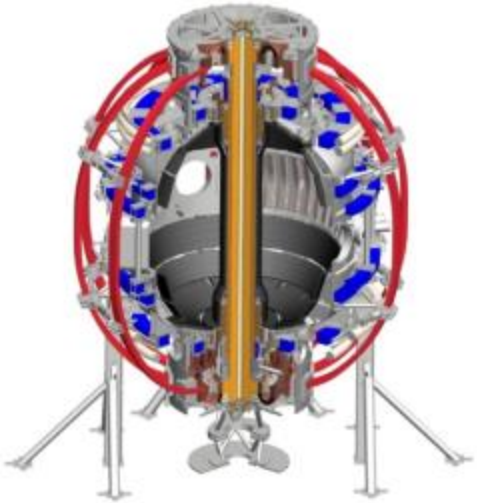
and the RCA Team

Restart External Review
B-318
May 28, 2015



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What is a Root Cause Analysis (RCA)?

A formal Root Cause Analysis is a systematic process invoked to investigate and determine the causes of accidents, incidents, near-misses and adverse condition. RCA's are identified in DOE-HDBK-1208-2012 and are detailed in PPPL procedure QA-019, to:

- Document an event, problem and/or process
- Understand what went wrong **and** what went well
- Provide insight into how the event and future similar events can be prevented
- Determine the cause(s) of the event and their significance
- Provide information on how to address these causes to prevent them from recurring

Advantages of a Root Cause Analysis

- Focus on preventing recurrence as well as provide immediate corrective action
- Provide objectivity in problem solving
- Aids in identification of contributory circumstances
- May predict other problems or systemic deficiencies
- Provides comprehensive set of potential solutions
- Suggests solutions that may be applied to other areas
- Identifies opportunities for improvement

Steps of a Root Cause Analysis

- Collect data
- Interview individuals
- Develop a timeline
- Analyze the event using RCA techniques
- Identify direct, contributory and root causes (plus any auxiliary issues)
- Identify those within the organization having responsibility and authority to correct these causes
- Identify judgements of need and recommend corrective actions
- Perform extent of condition (if necessary)
- Write report

RCA will be comprehensive

- Technical issues (designs, drawings, installations, etc.)
- Procedural issues (technical, process, etc.)
- Administrative issues (schedule, budget, chain-of-command, etc.)
- Etc.

RCA Team

- Comprised of knowledgeable people
- Varied skill sets
- Not directly involved with the event

John Lacenere – Electrical Engineer

Judy Malsbury – Quality Assurance – RCA Process Specialist

Michael Mardenfeld – Mechanical Engineer

Irving Zatz – Mechanical Engineer – Team Leader

Schedule

- RCA will be thorough and performed in parallel with restart activities. Due to the expansive nature of the RCA investigation, recommendations are not limited to CD-4 and should therefore be de-coupled from the CD-4 restart.
- Preliminary report due approximately late-June to early-July.
- Final report due approximately in mid-July.