

CGA Energy Nexus & Annual Technical Conference 2024

Fuelling the Future

Engineering & Integrity Roundtable

Chip Trimble
Manager, Engineered Solutions
CR Wall

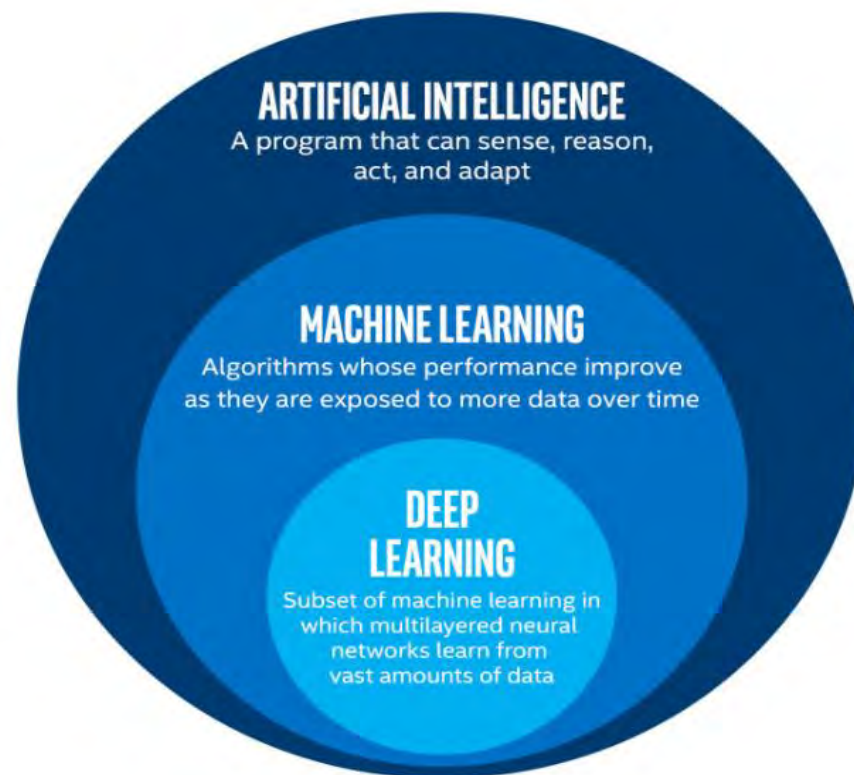
Jesse Miller, P.Eng.
Senior Engineer, Asset & Threat Management
SaskEnergy Inc.



Engineering & Integrity Roundtable

Machine Learning & Artificial Intelligence

- Where are you using Machine Learning & AI in your organization?
- What are your primary concerns / challenges with using / the evolution of Machine Learning & AI?
- How could we be using Machine Learning / AI better?



Engineering & Integrity Roundtable

Damage Prevention

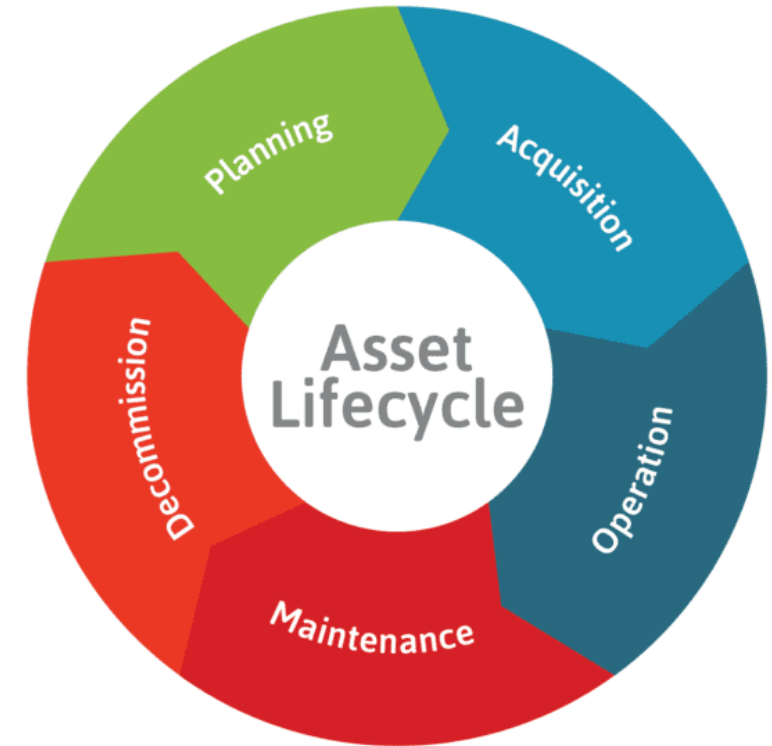
- Are we seeing a decline in the number of external interference-related incidents?
- Are Public Awareness campaigns finally breaking through and working more effectively with the public?



Engineering & Integrity Roundtable

Asset Management

- How do you balance Engineering & Integrity (i.e., safety focus) priorities versus Asset Management (i.e., financial based) priorities?
- Where do Engineering people fit into the Asset Management world within your company?



FTMaintenance

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Workforce Development

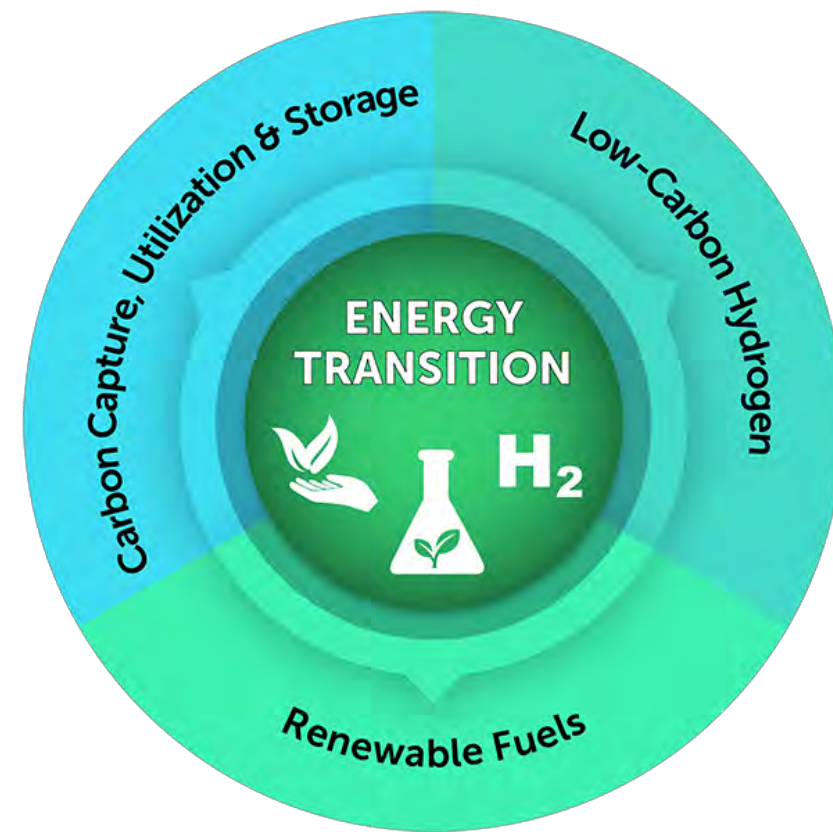
- How do you build up the skillset of new employees within your Engineering and Integrity teams?
- What strategies or tools are you using to develop and strengthen the soft skills of your technical staff?
- What successes have you had in hiring a diverse workforce for your team?



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Emissions Reduction / Energy Transition

- What's your favourite emission reduction / energy transition project going on right now in your company? What are the results thus far?
- When considering methane emission reduction opportunities, how do you evaluate capital upgrade costs that address small emission reductions?



Engineering & Integrity Roundtable

System Integrity & Reliability

- Major incidents often trigger a response to improve system integrity. How do you keep an integrity focus during long periods without a significant incident?
- How are you measuring reliability within your systems?
 - Are you concerned about system reliability (distribution vs. transmission), or at a component level (compressors, valves, gaskets)?
- What pressure, size, and / or % SMYS triggers performing inline inspections in your pipelines?



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Station Design & Integrity

- Do you have any single point of failures within your stations? Do you rate the failure risk of each component within your stations?
- Do you perform any station or facility integrity inspections? What do they consist of and what drove you to completing these inspections?
- Do you install heaters to combat the Joule-Thomson effect? How do you size your heating system?
- Do you install redundant equipment to mitigate the effects of equipment failures? What types of equipment do you install and why?



Engineering & Integrity Roundtable

Electrical System Evolution

- Are there Engineering or Integrity concerns / issues being encountered in the natural gas space because of electrical system expansion?
- Do we have less joint trenching happening throughout the country that is or may have a large future impact?

