



# Pressure Tube Integrity

**Marc Léger**

**Director, Materials Engineering**

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# Outline

- Use of leak detection for ACR fuel channel
- GDC 4 compliance



# Use of Leak Detection for ACR Fuel Channel

- **Pressure tube rupture is considered in the design basis**
  - No credit that rupture will not occur
  - Consequences of rupture are determined by safety analyses
- **AECL is not seeking any credit for LBB for fuel channels under Draft NUREG 1061 Vol.3**



# **Use of Leak Detection for ACR Fuel Channel**

- **Annulus gas leak detection and response is used as defense-in-depth**
- **ACR will have low probability of calandria tube consequential rupture in the event of a pressure tube failure**



# **GDC 4 Compliance for Fuel Channels**

- **Consequences of pressure tube rupture are considered in the design of the ACR 700**
- **Fuel channel complies with GDC 4**



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