**EVOLUTION OF NUCLEAR CRITICALITY SAFETY TRAINING AT ATOMIC ENERGY OF CANADA LTD. TO MEET ITS CHANGING NEEDS** 

> D. Pilgrim ANS NCSD Meeting, Wilmington, NC 2013 Sept 29-Oct 3





- Introduction
- History
- Development of the Nuclear Criticality Safety (NCS) Training
- Results
- Continuing Improvements



## Introduction AECL







# **History**

- Criticality safety was part of an overall nuclear materials control course
- Material did not meet all ANS 8.20 or the new Canadian regulatory document for NCS
- Tendency for criticality safety aspects tended to be obscured
- Training was provided to employees without real direction

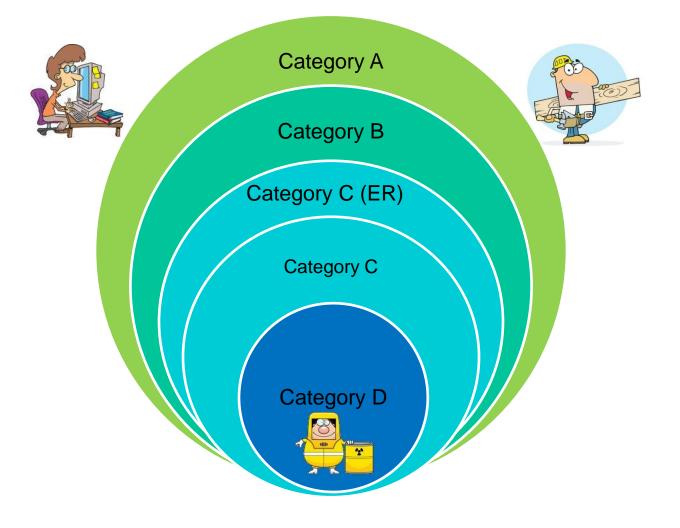


- Gap analysis performed to identify deficiencies between existing material, ANSI standards and regulatory documents
- Scope for who needed training was expanded
- 5 Categories for employees were created
- Course materials organized using a standardized approach to training.



- Every employee starts at the same category
- Categories are based on work performed and location
- Amount of training will depend on categorization







- Management were directed to categorize employees
- Focus of the training was on Category C and D employees
- Field visits
- Developing basic awareness training
- Develop training specific to Emergency Responders

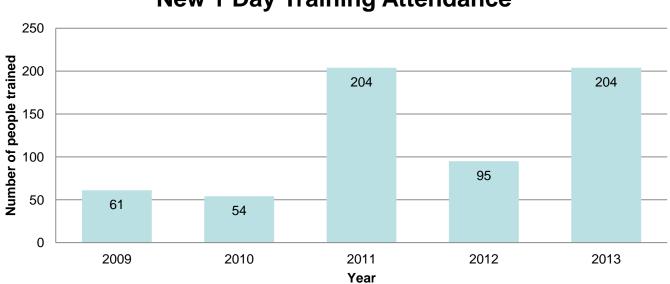




- Initially all training was in class
- Computer based training seen as an alternative to reach a wider audience base
- Employees to have received Category A training risen from 729 to 2366 to date







#### **New 1 Day Training Attendance**



- Introduced computer based refresher for the one day of training
- Program is reviewing the initial Categorization
- Program will be reviewing area specific training







