

AECL EACL



RFSP Training Course

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Course Agenda



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Canada 



AECL
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EACL
Énergie atomique
du Canada limitée



Introduction

- **Role of RFSP**
- **General Capabilities of RFSP**
- **Direct-Access File**



RFSP Model

- **Neutron Diffusion Equation**
- **Geometry – mesh spacing for ACR**
- **Lattice Properties Overview**
 - Uniform
 - Local Parameters (grid based)
 - History-Based Local Parameters (micro depletion)
- **Reactivity Devices and Device Properties**
- **Smearing of the Devices**



***TIME-AVER**

- **Time-Average Model**
- **Irradiation Regions**
- **Average vs. Spatially-Distributed Xenon Concentration**
- **Perturbations**
- **Flux Flattening**
- **Time-Average Equivalence**



***INSTANTAN**

- **Random Age Distribution**
- **Patterned Age Distribution**



***SIMULATE**

- **Snapshots**
- **Average vs. Spatially-Distributed Xenon Concentration**
- **Bulk and Spatial Control**
- **WIMS-Uniform-Parameter Methodology**
- **Micro-Depletion Model**



***CERBERUS**

- **Spatial Kinetics**
- **IQS Method**
- **General Scheme of Solution**
- **WIMS Grid-Based Method**



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