The Nuclear Industry – How a Community benefits

Dr. Neil Alexander
President
Organization of CANDU Industries
Nuclear does other things as well?

- Nuclear Medicine
- Preserving Foods
- Smoke detectors
- Sterilizing Medical Equipment
- Emergency Lighting
- Quality and Safety Inspections
A Canadian Gift to the World: Cancer Therapy and Nuclear Medicine

- **Every day, 76,000 diagnostic procedures** are performed using AECL’s supply of short-lived medical isotopes.

- **Each year, 12 million cancer treatments** are administered using Cobalt-60 from NRU (~33,000 treatments/day).
Where the jobs are
60 Years
Is it safe?

- In almost four decades of operation no member of the public has ever been harmed as a result of a radiation emission from a Canadian nuclear power plant or waste storage facility.

Restart workers celebrate 10 million hours without lost-time injury

TIVERTON, ON – June 11, 2008 -- Employees working at the Bruce A Restart Project have surpassed 10 million hours without an acute lost-time injury, marking the best safety record in the world's nuclear industry. "I've worked on large projects around the world and this is an impressive stretch of nearly 1,000 days," said John Sauger, Vice President, Bruce Power. "A Restart is never an easy job. I applaud everyone involved in this achievement."

Nuclear Workplace Safety

- 8 million hours
- Darlington and Pickering A and B nuclear stations – total hours without a lost-time accident
- Safety achievements
  - 2002: Bruce A and Darlington both surpassed 90 million hours without a lost-time accident
  - 2004: Only two incidents of a 24-hour shutdown
  - 2005: The world’s best safety record
  - 2006: 85% of Bruce A’s employees have zero lost-time accidents
But what about all that used fuel….how horrible is that?

Up to 100 years in dry storage

10 years in a pool

Isolated from the biosphere in a deep geological repository

※ In almost four decades of operation no member of the public has ever been harmed as a result of a radiation emission from a Canadian nuclear power plant or waste storage facility.
The battle for Ontario!
How important is Canada?

- **Leader since 1940s**
  - Invented CANDU power reactor
  - First sustained fission reaction outside of U.S.A
  - Invented cancer therapy
  - Largest exporter of medical isotopes & uranium

- **$ 6 B / year industry**
  - 30,000 workers
  - 150 companies

- **22 CANDUs in Canada**
  - 51% nuclear in Ontario Province
  - 16% of Canada’s total electricity
Electricity Sources in Canada (2007)

- Nuclear - 14.6%
- Coal - 20.7%
- Oil and Gas - 4%
- Hydro - 60.1%
- Internal Combustion and Renewables - 0.6%

Source: National Resources Canada (NRCan), 2008
Jeremy Warner:
Suez wants slice of UK nuclear
The Nuclear Difference
The Nuclear Difference!

Regular Manufacturing

Nuclear Manufacturing

Confidence
Proximity
All sorts of companies can join in