Progress on Construction of Australia’s Replacement Research Reactor (OPAL)
Overview

- Owner / Operator - ANSTO
- Aims
  - World class neutron research centre
  - Significant radioisotope production capability
  - Replacement for HIFAR
Overview (continued)

• Procurement Strategy
  ➢ Turnkey contract
  ➢ Detailed and demanding performance specification

• Contractor - INVAP SE
  ➢ Design, construction and commissioning
Overview (continued)

• Budget (Nov 99 $Aust)
  - Original $335.2M - Current $359.6M

• Schedule
  - Originally completion due at end 2005
  - Currently completion expected at end 2006

• Cost and schedule overruns due to:
  - Unexpected geological features
  - Increased security expectations
  - Regulatory complexities
Reactor

- 20 MW
- Compact core (~300 kW/L)
- Plate type LEU fuel
- $\text{D}_2\text{O}$ reflector
- Upward coolant flow (light water)
Current Status

- Project Launch
- Preliminary engineering
- Detail engineering
- Construction
- Manufacture and procurement

- Installation
- Pre-operational testing

- Commissioning
Current Status

• 8 years since project approval by government
• 5 years since contract with INVAP
• Work under the contract is 95% complete
• More than a year to complete the final 5%
What next?

• Complete installation and pre-commissioning and commence cold commissioning before the end of the year
• Load fuel during the first half of next year
• Complete the project before the end of 2006