ANSTO Overview

- Formed in 1954; HIFAR critical 1958
- $1.2 billion assets under management
- Annual turnover > $250 million
- 1200 employees; 250 Ph.D.'s
- OPAL Critical 2007
What is ANM?

ANSTO Nuclear Medicine (ANM) Pty Limited
Commercial subsidiary of ANSTO

Design, build & operate

Mo-99 Plant
- Fully operational mid 2016
- Mo-99 facility; 3,000 6 day Ci per week
- Use of LEU fuel & targets
- Proven, reliable technology

Synroc Waste Plant
- Fully operational 2017
- 100-150 HIP cans per year
Location

OPAL
Mo-99 Plant
Synroc Waste Plant
Commencement of Construction

- Preparation of the site is complete
- Construction commenced in June 2014
- The Hon Ian Macfarlane MP, Minister for Industry, officiated at a commencement of construction ceremony in May
Construction Site
Construction Site
Construction Site
Current Status ANM

Mo-99

Preliminary Design

Complete

Regulatory

Siting licence approved

Contracts

Detailed Design & Construct contract signed

Construction

Site preparation work undertaken

Construction commenced June 2014
Mo-99 Plant
Architectural Perspective
Mo-99 Plant
Architectural Perspectives
## Mo-99 Plant Schedule

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- **Conceptual Engineering**
- **Preliminary Engineering & Procurement**
- **Detailed Design**
- **Construction**
- **Cold & Hot Commissioning**
### Synroc Waste Plant

#### Preliminary Design
- Complete

#### Regulatory
- Siting licence approved (Facility will be a prescribed radiation facility)
- Construction licence approved

#### Construction
- Project due for completion approx. 12 months after Mo-99 facility
Why Synroc?

• Synroc is the safest and most economic method for dealing with waste on an international scale
• Solution to legacy waste challenge and on-going waste
• Synroc is ANSTO developed technology
• Plant will be used to demonstrate technology which is transferable to other applications
Volume of Waste at Disposal

Cementation final disposal volume
100m$^3$ (3532 cu ft)

Alkaline liquid waste per year
4m$^3$ (141 cu ft)

Final disposal volume
10m$^3$ (353 cu ft)

Synroc®
1m$^3$ (35 cu ft)
Industry Status

• In recent years there have been many proposals for new Mo-99 plants using new and existing technology.
  – If they all manufacture to their claimed capacity there will be an oversupply of Mo-99 which could affect long term viability of producers.

• For the benefit of the entire Nuclear Medicine industry it is time to accurately assess future manufacturing potential.
Project Validity

- Has funding been secured? YES
- Is technology proven? YES
- Have you produced at commercial scale? YES
- Is the project commercially viable? YES
- Do you have experience as a GMP manufacturer? YES
- Do you have back-up supply? YES
The BIG Question

Will ANM Mo-99 be ready when NRU ceases operations?

YES
Leading the world in LEU medicine
Thank you