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# LEU Mo-99

# Economic Considerations

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# Targets

- More required than if using HEU
  - Increased cost of targets
  - Increased inventory of targets required
- Target harder to manufacture
  - Try to maximise U density
  - Tight tolerances
  - Tungsten contamination may be an issue
- Result is higher cost

# Reactor Volume

- More targets required to be irradiated compared with HEU
  - More rigs to be handled
  - More irradiation positions utilised
  - Less space for other targets
- Result is higher cost

# Target Dissolution Time

- Longer time required for target dissolution compared with HEU
  - Longer run time
  - More decay during processing
- Result in small cost increase

# Increased Waste Volumes

- Intermediate Level Solid Waste
  - Increased volumes of uranium residue
  - Significance not high but needs to be managed
- Intermediate Level Liquid Waste
  - Increased volumes
  - Significant difference resulting in higher costs for treatment and storage

# Summary

- Making Mo-99 from LEU is not a technical issue
  - Can be made in large volumes
  - Mo-99 has no impact on generator performance
- It can be made in a commercially viable manner
  - However there are increased costs
  - Market needs to accept this fact and expect price increases to ensure viability of supply

The Ansto logo is displayed in white against a blue background with abstract light streaks. It features a stylized 'A' that incorporates a circular element with a dot, resembling a stylized atom or a specific scientific symbol, followed by the lowercase letters 'nsto' in a clean, sans-serif font.

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**Thank you**

