

Human resources issues in the uranium production cycle – a growing concern for operators and regulators

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What is the situation?

- The global uranium mining industry was effectively stagnant from 1985 to 2003
- Uranium mining began a resurgence of activity following a price increase in 2003

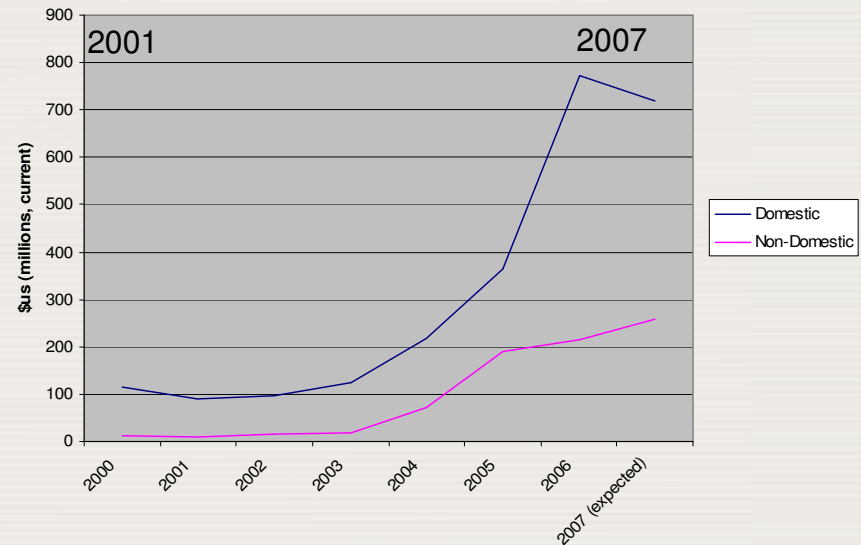


Caetite Uranium Mine, Brazil

What is the problem?

- Global Uranium Production Cycle activity is expanding rapidly
- The industry has failed to attract new, younger entrants in all skill areas
- The present work force is ageing and retiring
- Average age of uranium mining and processing experts is now 50+

Uranium exploration expenditure



What will happen?

- Possible constraints on development of uranium resources due to shortage of suitably qualified and experienced personnel
- Slow down in discovery of new uranium resources
- Slow down in development of new uranium mines and fewer increases in production

RESULT- increased risk of

- Slow down in NPP fuel supplies > shortages of power > delays in industrial development

Solution options

- Give priority to training younger people in uranium production cycle activities
- Revive specialist training in uranium geology and exploration and processing
- Encourage mentoring by major producers
- Try to retain older staff for longer so their knowledge and experience can be handed on properly

Who and how to do this?

- Use IAEA Technical Cooperation programmes at regional and national levels for training
- Get governments to fund more specialist training places and courses
- Prepare plans to staff regulatory bodies as well as producer companies
- Establish more programmes jointly with industry – similar to WNU and School of U Production
- Get operators and regulators to work together on meeting their staffing needs

When to do this?

- Start introducing suitable courses in universities and colleges **now**
- Discuss with uranium producer companies, Governments and Associations (WNA etc) **now**
- Prepare new projects for IAEA TC cycle in 2012-13 **starting now**
- Plan to retain older staff **from now on**



Participants in IAEA regional training course at Rossing Uranium Mine, Namibia

Summary

- Nuclear power expansion is happening.
- Uranium raw material demand is increasing and mining production capacity may be a constraint due to lack of past and current investment in required human resources
- Global industry needs to act together and soon
- Remember that NPP industry will compete for some skills as well as operators competing with regulators for similar staff in all areas

Conclusion

- Uranium production cycle needs new, young staff for all stages to support the anticipated expansion of activity globally.
- Planning and implementation of training need to start now to avoid later production bottlenecks
- Older staff need to be attracted and retained to help cover the interim period and add value to the training



Kayelekera Uranium Mine, Malawi 2009

