

Challenges Facing Nuclear

- **Lower capital cost, and shorter construction time needed.**
- **Get on with the waste disposal solution, including recycling spent fuel.**
- **Government paid insurance – Price Anderson.**
- **Lower proliferation threat for worldwide deployment.**
- **Gov't support next generation of reactors.**
- **Assure adequate trained manpower supply.**

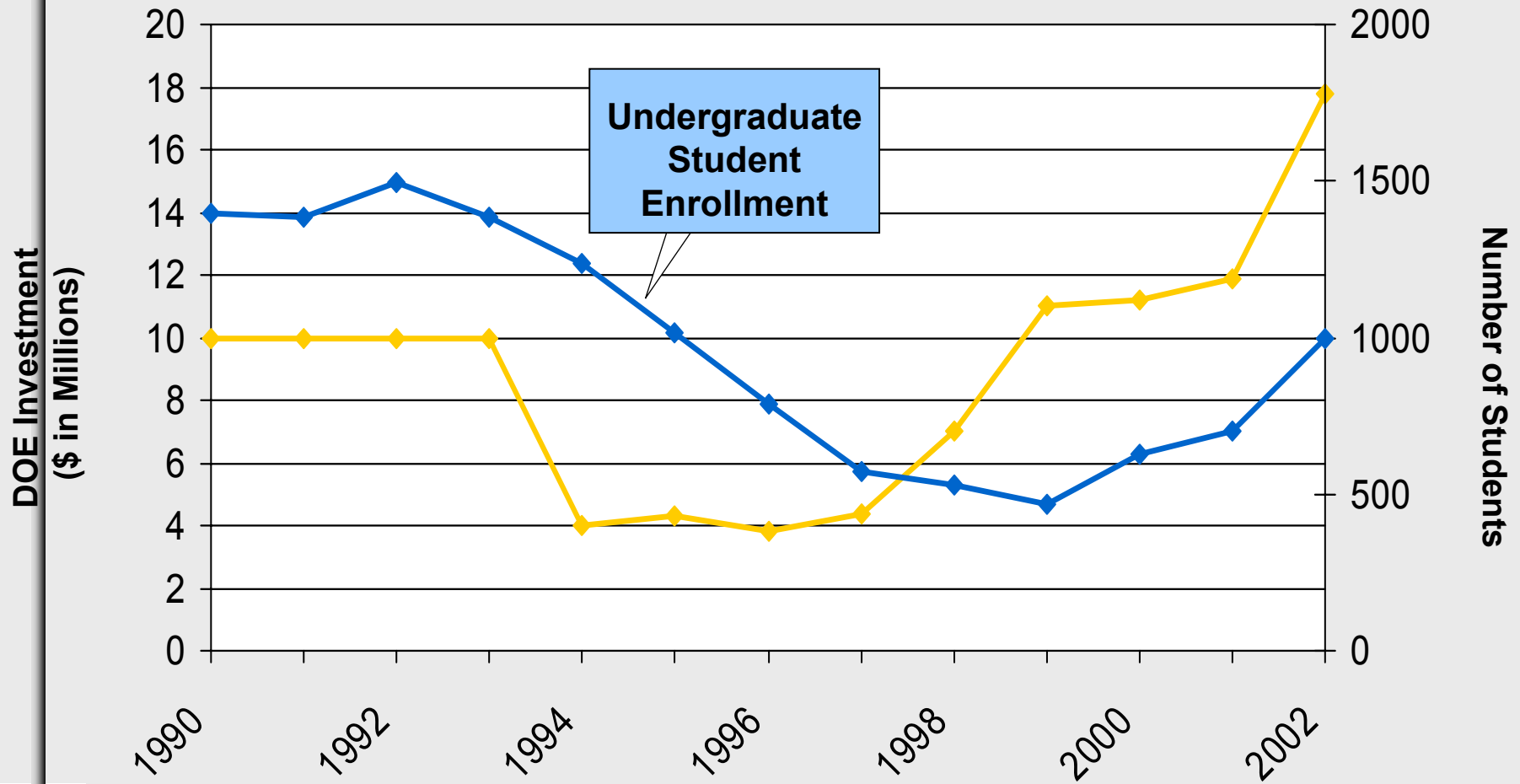


Actions to Address Challenges

- **Address security (proliferation) risk of nuclear materials without significantly impacting beneficial use.**
- **Proceed with Yucca Mtn. repository and Advanced Fuel Cycle Initiative to address nuclear waste.**
- **Address public fear of nuclear with scientific facts and grassroots personnel involvement.**
- **Develop program to address dwindling nuclear professionals and ANS membership.**



Trends In Enrollment



Grassroots Initiative

- **Address public fears with scientific facts and by ANS members getting involved in local events, with local media, and Representatives.**



Top Challenges for Next Generation

- **Continue professional development / Be Active!**
- **Maintain the Safety Culture.**
- **Engage local Legislators - Civics 101: Influence the energy awareness of your Representative.**
- **Deal with public opinion; changing the “Nuclear Perception.”**
- **Bring reality into discussions of alternate energy.**
- **Make a difference with your life & your career.**



SUMMARY

- Nuclear produces 17 to 20% of electricity globally and in U.S. That percentage will grow.
- New plants will be ordered in U.S. within 5 yrs.
- Nuclear is already cleaner and safer than oil, gas, and coal, and has lower operating cost.
- Worldwide growth of elec. production will need nuclear to control environmental damage.
- Capital cost will fall to \$1,000/megawatt, or lower, in new reactor designs.
- Spent fuel (waste) and nuclear weapons proliferation are solvable political problems.



The Future

“The optimist thinks that this is the best of all possible worlds, and the pessimist knows it is.”

J. Robert Oppenheimer

