

NOW WHAT?

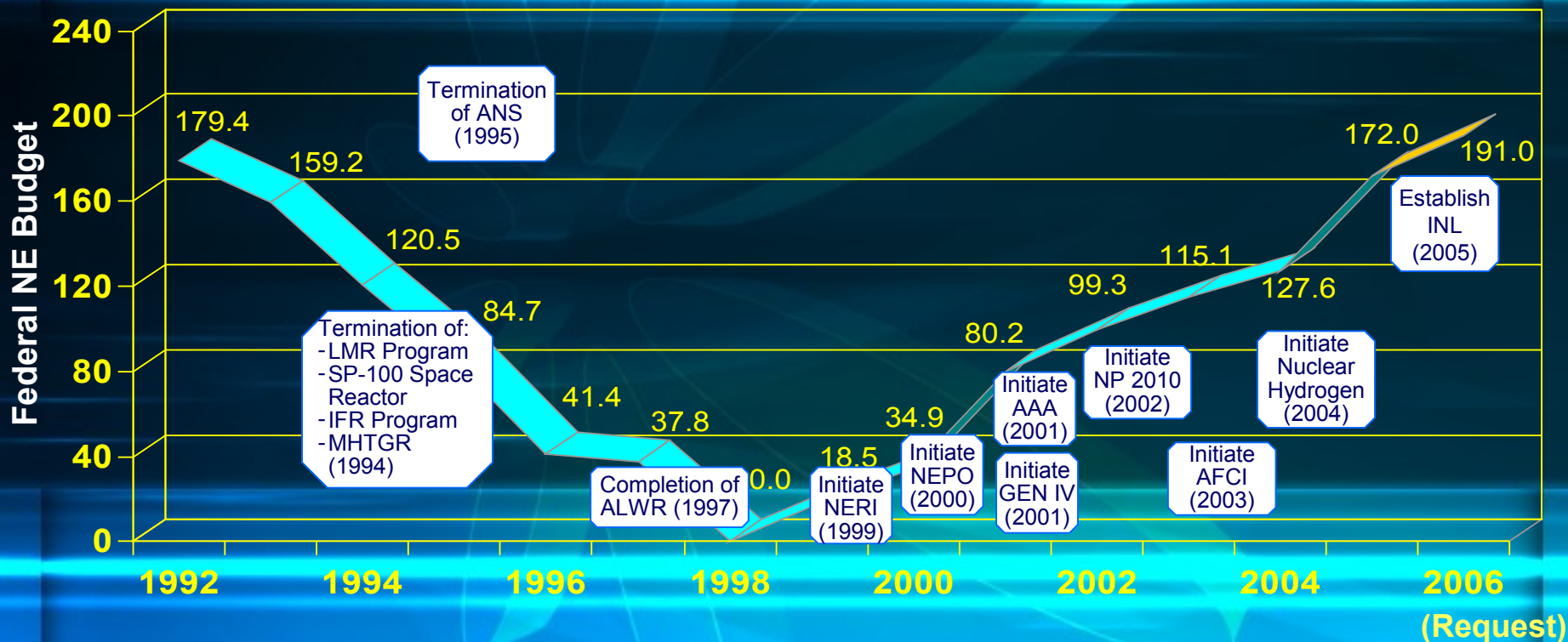
*A Few Thoughts from
Bill Magwood*

Joint TRTR – IGORR Meeting
September 13, 2005
Gaithersburg, Maryland

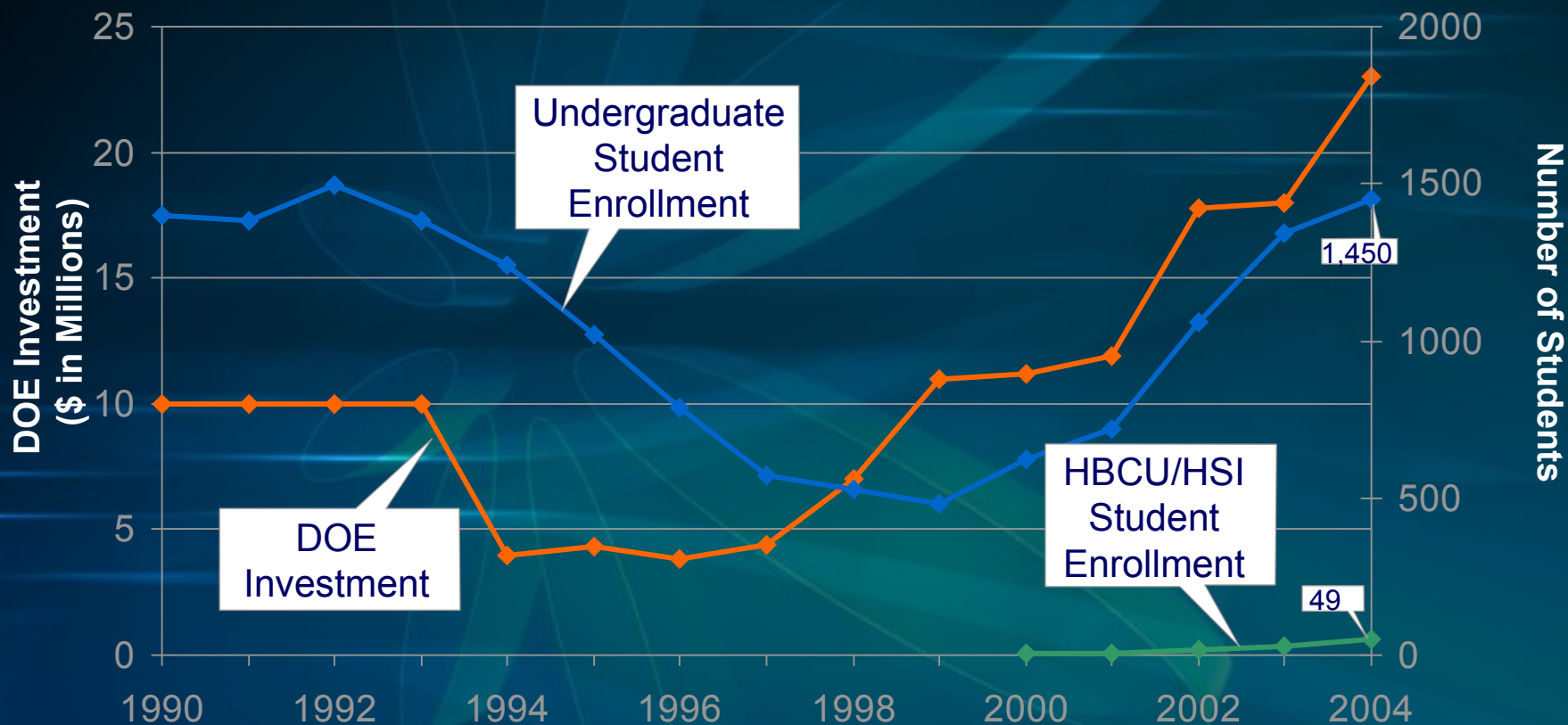
The Last Seven Years: A Time of Progress

- Reasserted U.S. Nuclear Leadership
- Established a Central Nuclear Energy Lab
- Spurred Industry to Seriously Consider New Plants
- Established a U.S. Path for Spent Fuel Recycling
- Helped Rebuild U.S. Nuclear Education

Progress as Measured By Government



Progress as Measured By Academia



The Larger Picture

- **ENERGY**

- World Oil Production May Have Peaked
- China & India Will Devour World Energy Resources
- Natural Gas Isn't the Infinite Fuel After all
- Renewables are Running into the Reality Wall
- The Cleaner the Coal, the More It Costs

The Larger Picture

- **ENVIRONMENT**

- Climate Change is Now Popular Wisdom
- Health Effects of Air Pollution
- 52% of Americans Believe the Environment is Getting Worse*

- **EDUCATION**

- We are Losing Ground in Science and Engineering
- High Technology Skills are Being Sourced Overseas
- Government and Industry Investing Elsewhere

Possible Answers

- **Energy & Environment:**
 - Cut U.S. Economic Activity
 - Require Construction of Lots and Lots of Wind Mills
 - Require Vastly Higher Efficiency
 - Require Construction of Many New Nuclear Power Plants
 - Tax and/or Regulate Carbon
- **Education:**
 - Start a New Cold War or Space Race
- **All:**
 - Do Nothing Much New and Hope for the Best

A Better Path

- **We Need to Set National Hydrogen Goals**
 - President Bush Had the Right Idea
 - We Need to Move from Concept to Implementation
- **We Need a National Higher Education Policy**
 - Break new ground—investment not driven by other national priorities
 - Rebuild the Strong Linkages Between Academia, Industry, and Government

Closing Observations

- **Socialized Economies Overseas have Learned how to Compete Effectively with US Industry**
- **Higher Education Has Long Been Our Competitive Advantage – But Today's Investments Are Not Enough for the Future**
- **Americans Will Demand More Action on Environment**
- **The New National Energy Policy Law is a Step in the Right Direction – But We Need to Do More**

We Need to Do More of This



**Students from Several
Pittsburgh High Schools
on the Way to Visit
Oak Ridge National Lab**



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