The Challenge of Growth in Nuclear Power:

It Ought to Work, But Will It?

Thomas S. O’Neill
Vice President, New Plant Development

Harvard Electricity Policy Group
May 29, 2008
Regulatory & Policy Issues

✓ It ought to work
  • Sound licensing process
  • Industry coordination and support for standardization
  • Generally supportive public opinion
  • Energy Policy Act of 2005
  • Focus on climate change and carbon

✓ But will it?
  • New licensing process not yet tested
  • Pending change in administration
  • Yucca Mountain stalemate
  • No climate legislation yet

Uncertainties must be reduced
Cost Issues

✓ It ought to work
  • Clear and sustained production and fuel cost advantage
  • Competitive with other low carbon baseload alternatives
  • Shrinking reserve margins
  • Rising power prices
  • Improvements in construction methods

✓ But will it?
  • Volatile construction commodity prices
  • No firm vendor prices
  • Financing risks
  • Carbon pricing is still a theory
  • U.S. nuclear industry construction track record

Risk-sharing among stakeholders is essential
Infrastructure Issues

✓ It ought to work
  • Successful Asian experience
  • Strengthening supply chain worldwide
  • Forecast worldwide nuclear development at only 25% the pace of the 1980s
  • Center for Energy Workforce Development, regional labor initiatives

✓ But will it?
  • No recent U.S. nuclear construction experience
  • U.S. nuclear manufacturing infrastructure has atrophied
  • Worldwide demand is creating production bottlenecks
  • Labor force continues to age

Infrastructure response depends on first movers
How Do We Make it Happen?

- Continued excellence by current fleet
- Adopt different business models for new nuclear
  - Share the risks through innovative partnerships
- Take advantage of experience & expertise worldwide
- Disciplined project execution
- Revitalize manufacturing infrastructure
- Communicate the strength of the industry
- Drive public policy issues to resolution

Reduce uncertainties and potential for delays; the market will react intelligently.