

RIC 2001

Deregulation, Session W13

Surviving and Thriving with Deregulation

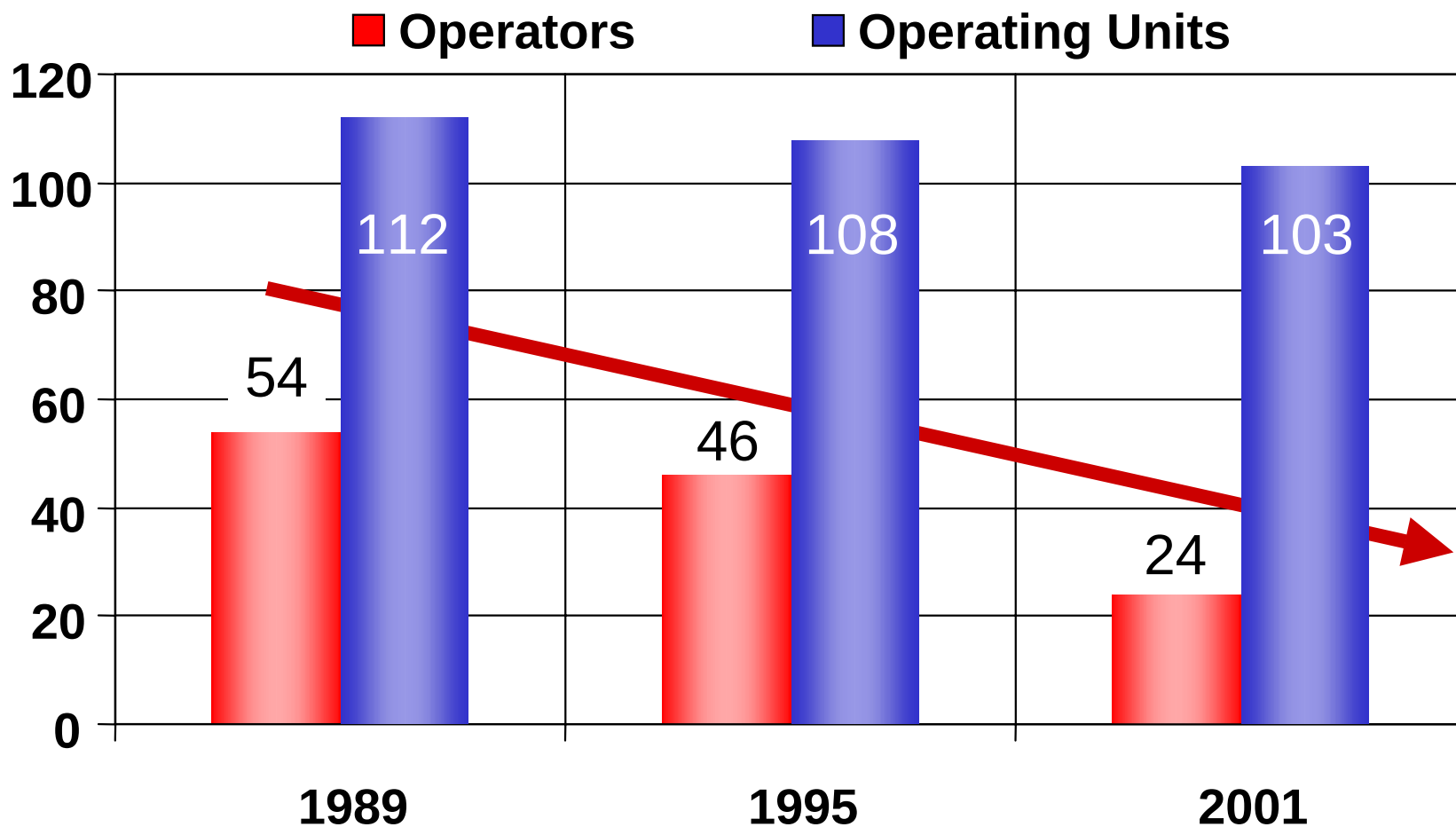
Dan Keuter
VP Nuclear Business Development
Entergy Nuclear
March 14, 2001



Electric Restructuring Has Increased Nuclear Consolidation

- **Acquisitions**
- **Majority Owners Buying Out Minority Owners**
- **Mergers**
- **Nuclear Operating Companies**

Electric Restructuring Has Increased Nuclear Consolidation

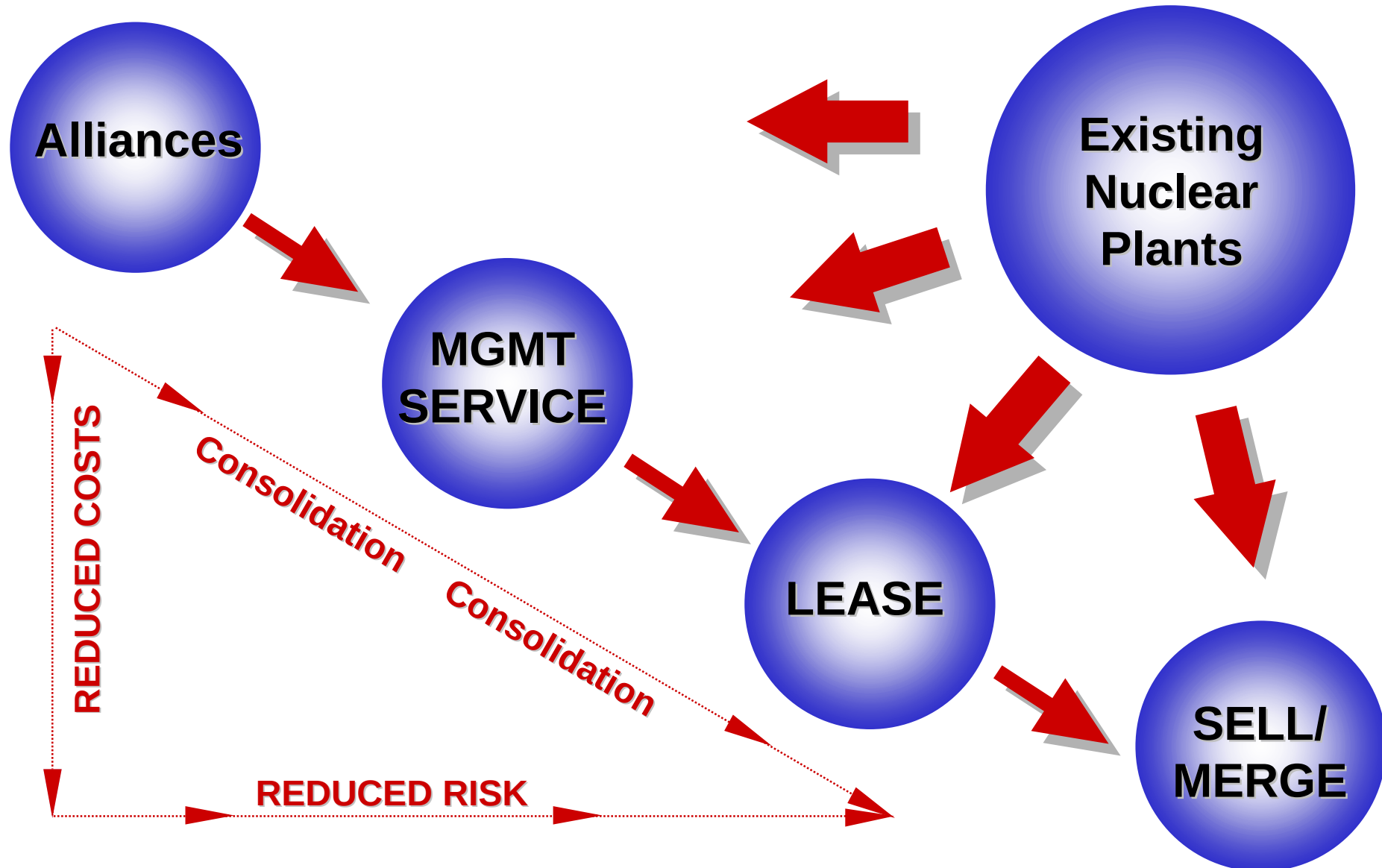


Probably Down to 6 Major Operators in Next 6 Years

Advantages of Consolidation

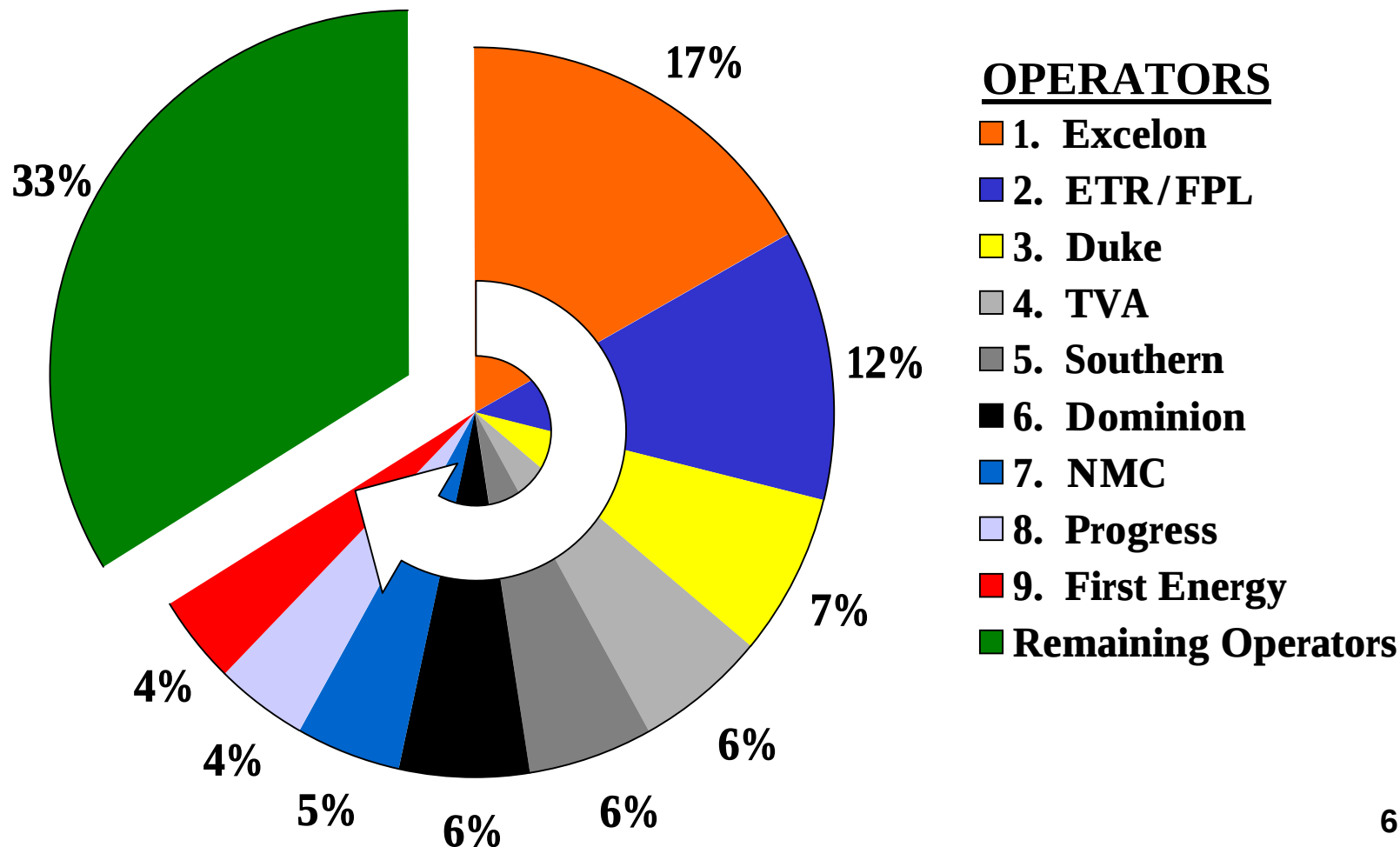
- **Nuclear Focused Management & Oversight**
- **Economies of Scale & Resource Sharing**
- **Sufficient Resources**
 - ◆ **Financial**
 - ◆ **Management**
 - ◆ **Technical**
- **Fast and Thorough Response**
- **Regulatory Understanding & Interface**
- **Risk Tolerance - Mutual Fund Effect**

Progress of Consolidation



Current Major Operators

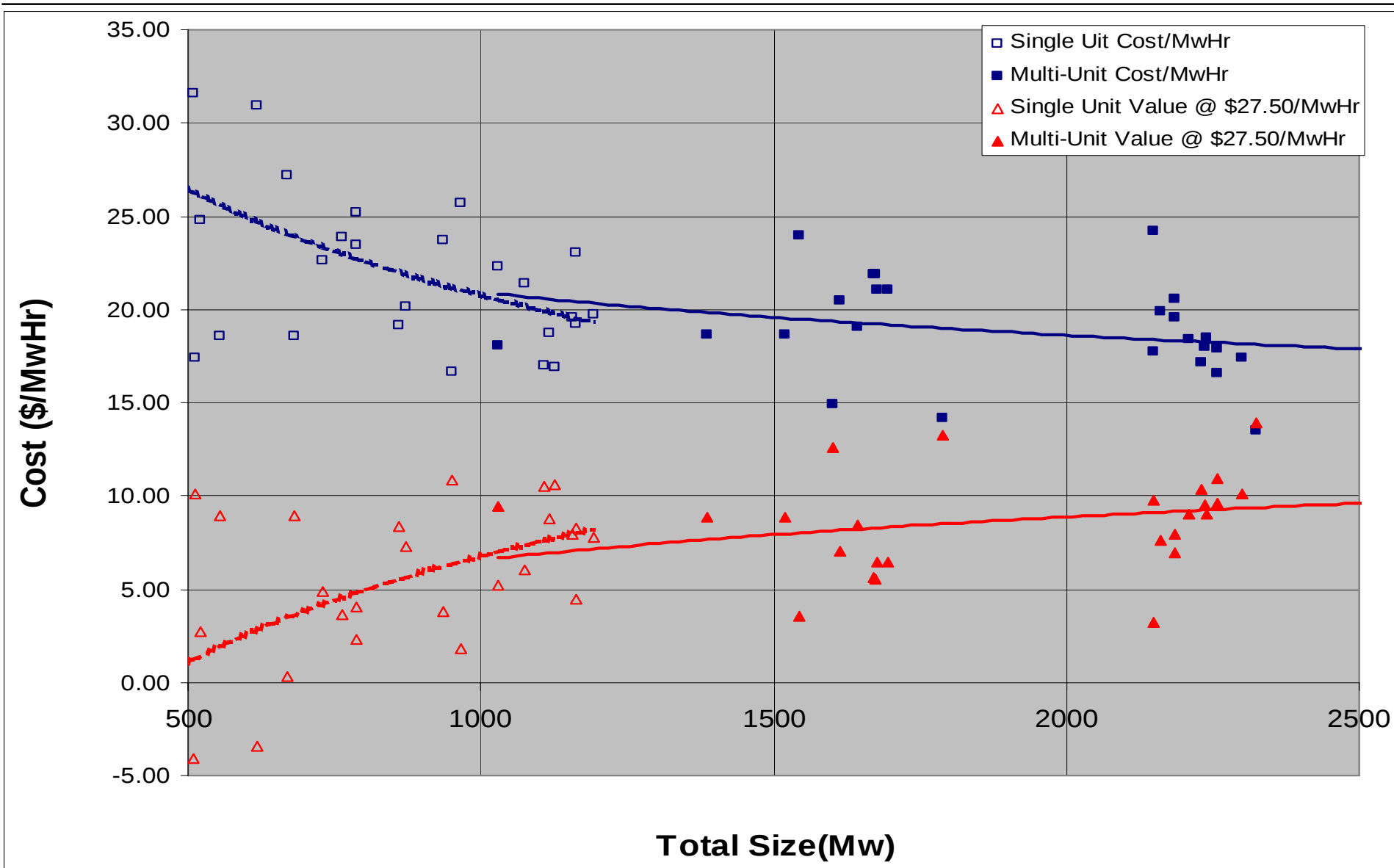
1/3 of the Operators Manage 2/3 of the Generation



Plant Value Drivers

- **Continued Safety**
- **Size of Plant and Number of Units**
- **Market Price Forecast**
- **Forward Operating Costs**
- **Plant Reliability**
- **People**

Cost/Value vs. Size



Value vs. Size Analysis

$$\text{Value} = \left[\begin{array}{c} \text{Power} \\ \text{Price} - \text{Cost} \end{array} \right] \times \left[\text{Generation} \right]$$

Small Single Unit

$$\text{Value (\$/MW)} = \left[\$27.5 - 26 \right] \times \left[\text{Generation} \right] = \underline{1.5}$$

Large Single Unit or Dual Units (25% Savings)

$$\text{Value (\$/MW)} = \left[\$27.5 - 19.5 \right] \times \left[\text{Generation} \right] = \underline{8.0}$$

25% Savings Increases Value by a Factor of 5

Regulatory Approval

State:	PSC(s), Environmental Permits
Local:	Property Taxes/EP/Real Estate
IRS:	Decommissioning Trust
FERC:	PPAs/ Asset Transfer Interconnection/ EWG/ Market Based Rate Authority
DOJ/FTC:	Hart Scott Rodino (Anti-Trust)
NRC:	License Transfer
FCC:	Communication Licenses

NRC Impacts

- **Numerous License Transfer Applications**
- **To-Date All Approved in Timely Manner**
- **Commission Order Required Hearing Related to NYPA**
- **Decommissioning Fund Alternatives**
- **Technical Qualifications of Mgmt Staff**
- **Organizational Structure**
- **Required Financial Assurances**
- **Price Anderson Indemnity**

California - The Perfect Storm

Three Colliding Events...

- ◆ **Lack of Generation/Transmission Development**
- ◆ **Doubling of Natural Gas Prices**
- ◆ **Deregulation with No Long Term PPAs**

California will slow down nuclear consolidation
but it **will** continue due to its advantages

Sellers **will** want long term PPAs

California could **really** use the 930 MW from
Ranch Seco today

Building New Nuclear Plants

- **Early Site Permitting**
- **Inherently Safe/Low Cost Standard Design**
- **Resolution of High/Low Level Waste Disposal**
- **Continued High Natural Gas Prices**
- **Environmental/Carbon Credits**
- **Public Acceptance of Nuclear/NIMBY**

**Demonstration Plants Will Be Co-Sponsored By
Major Nuclear Companies With Help From DOE**

Conclusion

- **Consolidation will make plants:**
 - ◆ **Safer**
 - ◆ **Reliable**
 - ◆ **More Cost Effective**
- **Larger and financially strong operators will stabilize the industry**
 - ◆ **Extending the life on existing plants**
 - ◆ **Building new plants**
 - ◆ **Decommissioning and repowering**

Consolidation is needed to Survive and Thrive