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# **The US Nuclear Challenge: Maximum Success Strategy**

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# Maximum Success Strategy

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**The purpose of this  
presentation is to  
challenge the US nuclear  
industry's  
readiness and urge improved strategies**

## Major Improvements in US Nuclear Situation

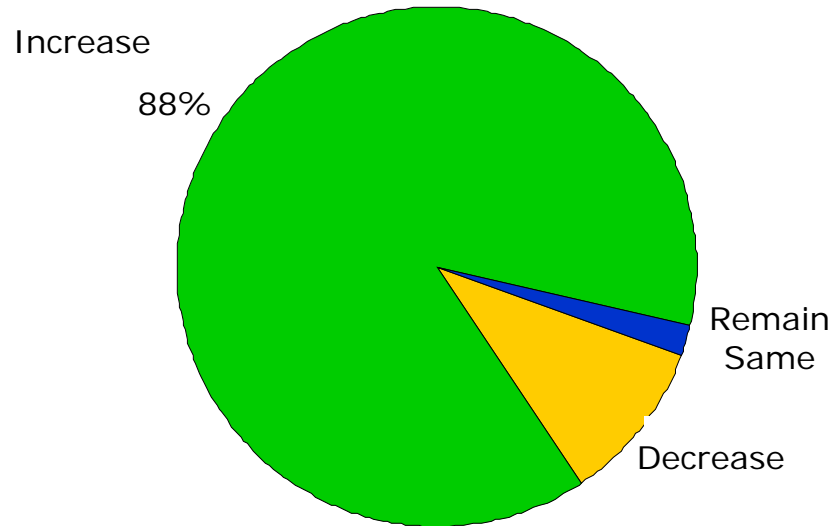
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- **Comparative cost of nuclear improving**
- **Improving public support**
- **Growing climate change commitment**
- **Strong support for renewables and other non-fossil alternatives**
- **More secure ratebase financing**

**The comparative advantage of nuclear  
is growing**

# Increased Commitment to Climate

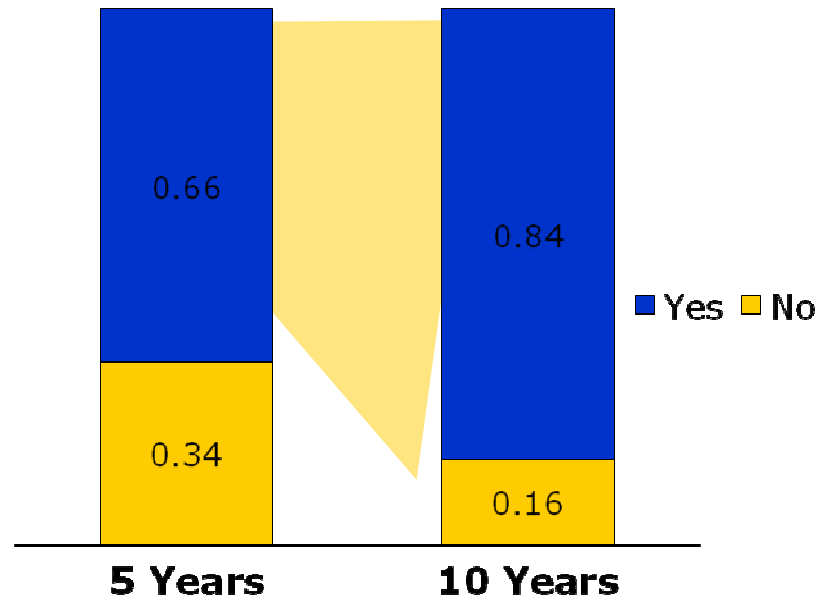
**Expected Change in Pressure To Act On Climate Change**



Q13: On a scale of 1 to 10, how important will each of the following issue be to your company (1-3 years)?  
 Q22: In the coming year, will the pressure to act on global climate change...

# Financial commitments will expand

## Expect Financial Commitment to Greenhouse Gas Reductions



Q24. How would you characterize your organization's investments, or incurred costs, to address greenhouse gas emissions?

Today's goal is a...

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**Maximized strategy  
for the new global  
nuclear fleet**

- **More effective US approach**
- **More globally-driven offensive**

## The US goal should be...

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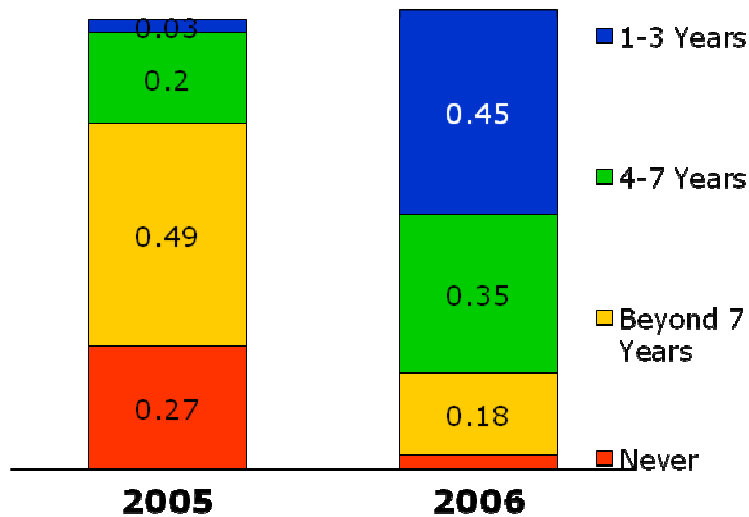
**To build a fleet  
of at least 20  
new reactors,  
most under construction  
within 10 years**

**Industry is hesitant to commit to specific  
goals**

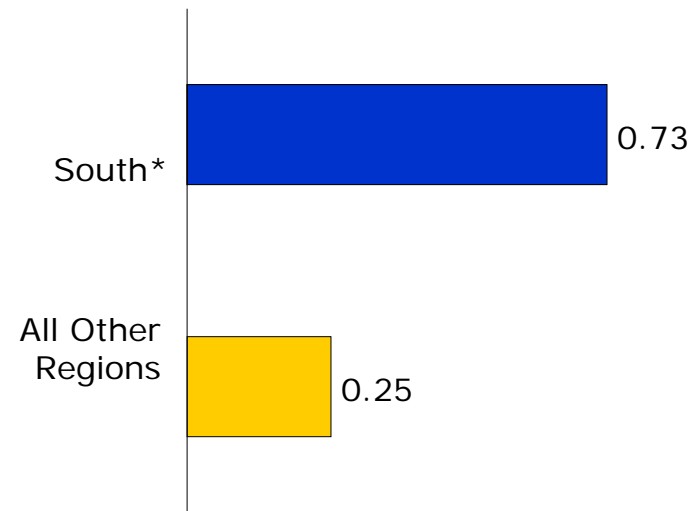
# Nuclear optimism growing among CEOs

- Almost half expect orders in the next 1-3 years, and over 75% expect orders in 1-7 years

Expected Timing of New Nuclear Capacity



Expect Nuclear Construction in 10 Years in...

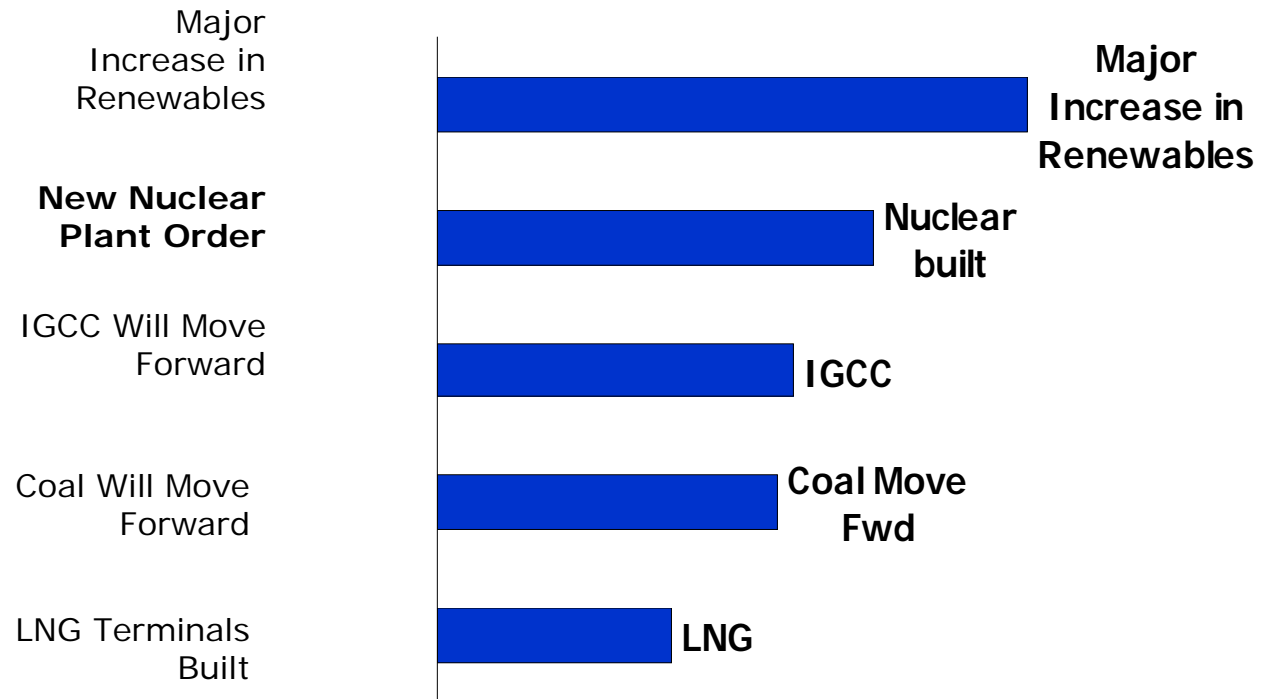


Q36: When do you expect a new nuclear plant order in your region?  
Q40: In the next 10 years, do you agree that...

\*Caution: Small base (n=19)

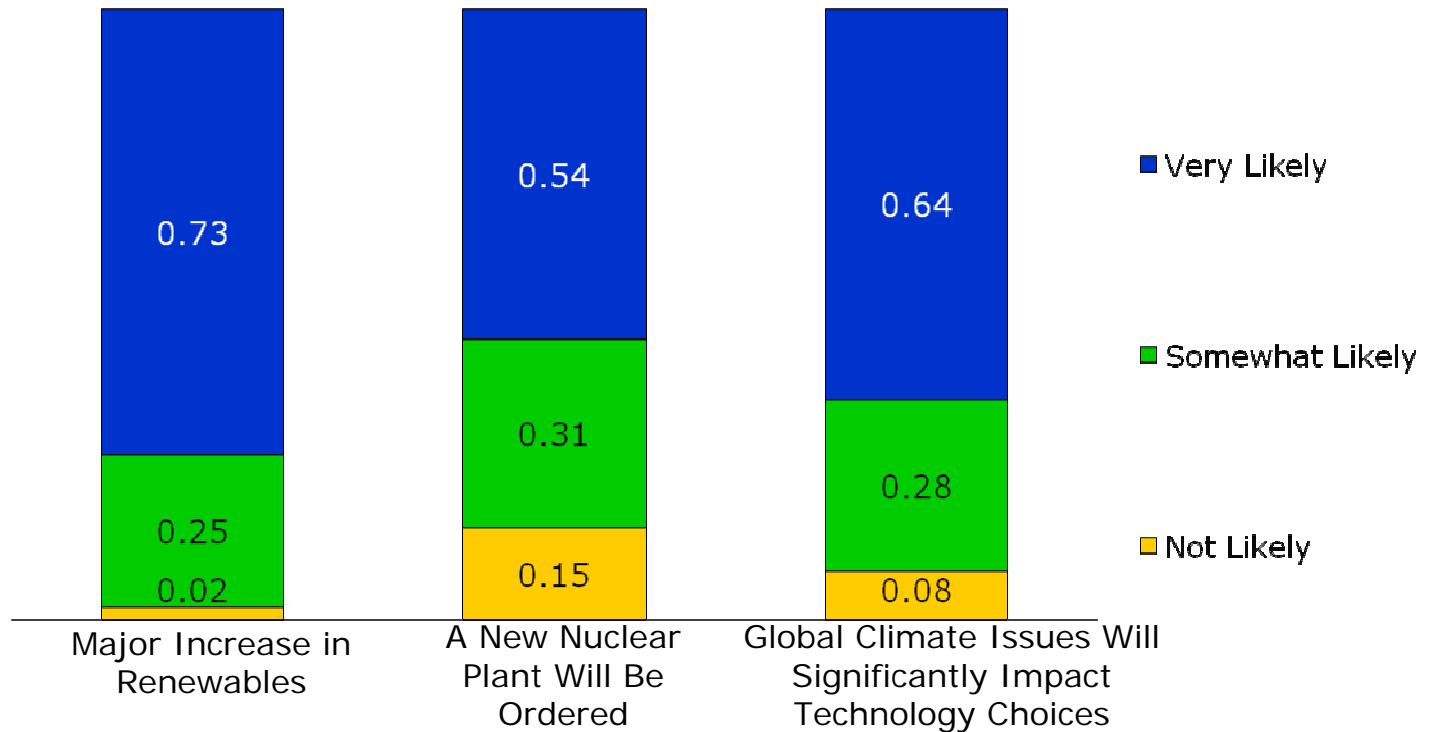
# US Generation Priorities

## Generation Developments (Very Likely)



Q30: How would you describe the likelihood of each of the following generation developments in the next 1-3 years? Would you describe each of the following as very likely, somewhat likely, or not likely?

# Generation Strategies



Q30: How would you describe the likelihood of each of the following generation developments in the next 1-3 years? Would you describe each of the following as very likely, somewhat likely, or not likely?

## Characterization

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**Current US approach  
will be successful but  
at a high price and take longer than  
necessary**

## US Reality Characteristics

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- **No effective national consensus process**
- **One region only commitment—the South**
- **Weak link to climate**
- **Weak government leadership and continuity**
- **Competitive cowboy industry free-for-all**
- **3 ½ competing reactor technologies**
- **15+ potential buyers**
- **Regulatory “change as we go” approach**
- **Delayed long-lead procurements**
- **Reserved approach by many utility executives**

## Standardized Fleet Approach Needed

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- **Industry is tending toward centripetal energy**
- **Unistar fleet approach makes the most sense**
- **NRC process discourages efficient one-time approach**
- **Risk of repeating many first generation problems is increasing**

## The bottom line is..

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**The US is pursuing a sub-optimal approach that will delay orders, challenge credibility and exacerbate uncertainty**

**The exception is  
Unistar which  
has a fleet approach**

## What is still needed

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- **Effective support from public opinion leaders**
- **Much stronger links to climate-willingness to put coal at risk**
- **Self-limits on cowboy mentality**
- **Narrowing of technology options and even more emphasis on a true one shot approach at NRC**
- **COL approach is going to slow down overall process-destroys intention of licensing process,**
- **New NRC chair has opportunity to demand a unified approach**
- **Potential for consensus first project is not good but worth trying again**
- **Long-lead time global procurement consortia needed**
- **Continued progress on waste management-including GNEP**

## More Specific Challenges

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- 1. Continued excellent performance of current fleet**
- 2. Steady and timely regulatory approvals**
- 3. Open, communicative public attitude**
- 4. Nuclear accepted as environmental solution**
- 5. Supportive local hosts**
- 6. Continued progress on waste management**
- 7. Cost-effective designs**
- 8. Short construction cycles**
- 9. High fossil fuel prices**
- 10. Large buyers with long-term commitment to large fleets of new units**
- 11. Strengthened transmission grid**

## Conclusion

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- **Nuclear future is assured**
- **Scale and timing of deployment is not certain**
- **Major improvements in strategy needed**
- **Large global fleets will perform better**



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