

Launching ERM: Experiences from Progress Energy

ERM Roundtable Discussion
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Progress Energy

Progress Energy Overview

- \$8.7B revenues
- \$26.3B assets
- 24,000 MWs
- 2.8MM retail customers
- \$11+B market capitalization

Why ERM?

- As a Fortune 250 Company, it is expected
- As a regulated utility, it is expected by stakeholders
 - ♦ ERM demonstrates risks are being identified and managed
 - ♦ Peer review – selected utilities

	Utility A	Utility B	Utility C	Utility D	Utility E	Utility F
Dedicated Risk Organization	●	●	●	●	●	●
Risk Organization Size	●	◐	●			○
Enterprise Risk Focus	●	◐	●	○	●	●
CRO Direct Report of CEO	○	○	●	●	○	○
Senior Executive Risk Committee	○	●	●	○	●	●
Optimization of Enterprise Portfolio	◐	○	◐	○	●	○
Risk Management Used for Capital Allocation	○	○	◐	○	○	○
Risk Management Used for Strategic Planning	○	○	◐	○	◐	○
Enterprise VaR Produced	◐	○	○	○	○	○
Earnings at Risk Quantified	○	◐	●	○	●	●
Cash Flow at Risk Quantified	○	◐	○	○	◐	○
Stress Testing Employed	◐	●	●	○	●	●
Diversified Risk Metrics Produced	◐	○	●	○	●	◐
Regulatory Operations Included in Risk Assessment	◐	○	◐	○	●	○

Legend: ○ Little or no current activity
 ◐ Moderate activity or commitment to fully develop in the near future
 ● Well developed activity

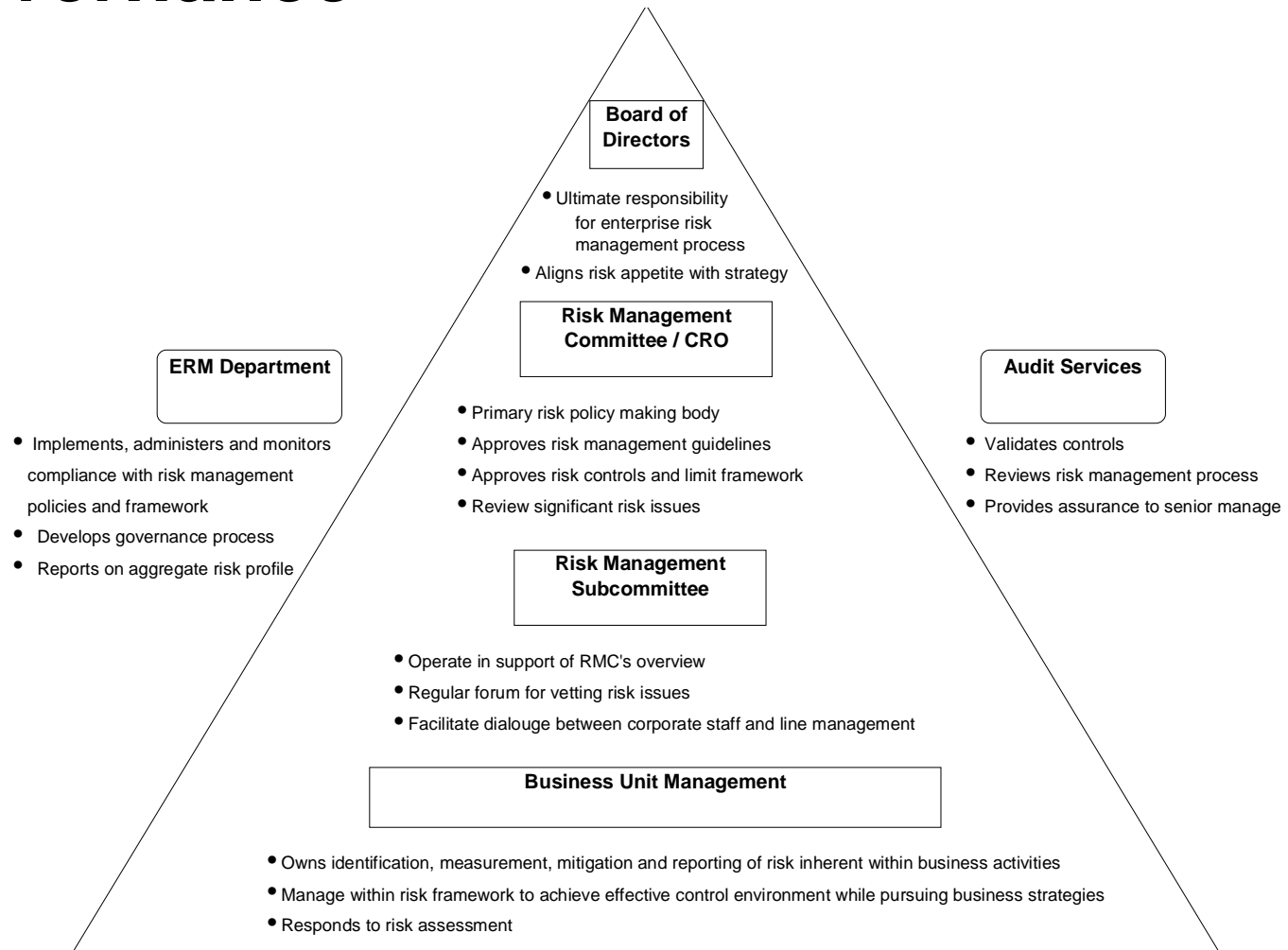
Why ERM? Need

- 1996-1998
 - ◆ Policy needed for use of derivatives
 - ◆ Risk Management formed within Treasury
- 2001
 - ◆ Focus moves to newly formed power & gas trading operation at Progress Ventures
- 2002
 - ◆ Risk Management becomes Enterprise Risk Management
 - ◆ CRO hired
 - ◆ Focus expands to enterprise
- 2004
 - ◆ Expectations - New Corporate Climate

What is ERM at Progress Energy?

- Align risk appetite and strategy
- Protect against unforeseen losses
- Ensure earnings stability
- Provide independent & transparent risk assessment
- Maximize share price & shareholder protection

What is ERM? Governance



What is ERM?

Key Insights

- Risk management adds value
- Process – continual and evolving
- Risk should be viewed holistically
- Risk management is everyone's responsibility
- Avoid opportunities that are not understood

Companies make money by taking risk and lose money by not effectively managing it

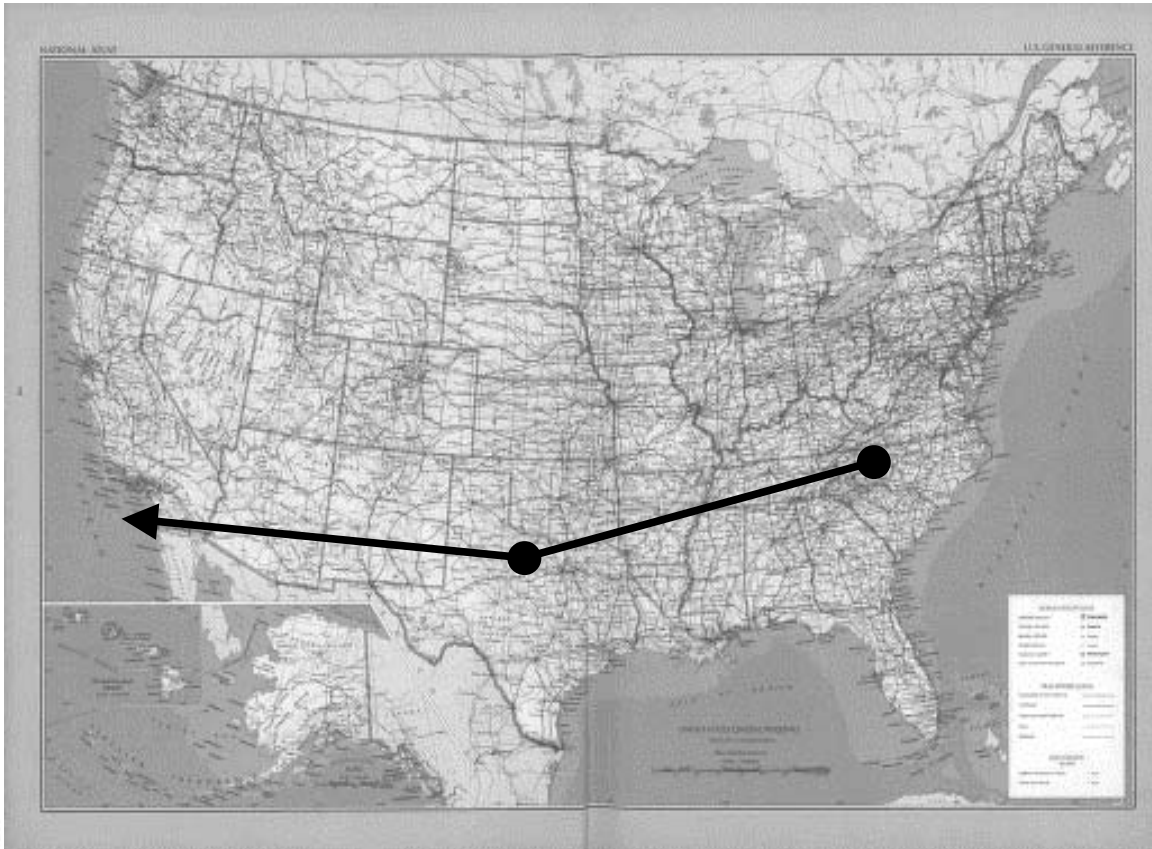
How did Progress Energy Implement ERM?

- Executive Sponsorship - CFO
- Limited focus initially – interest rate derivatives, a few earnings drivers, and credit
- Creation of a Risk Framework
 - ◆ BOD, Risk Management Committee, Sub-Committee Structure (BU's, Credit, Finance, etc.)
 - ◆ ERM Dept. creation and link with Audit,
 - ◆ Development of Risk Guidelines with a Limit Structure
 - ◆ Re-writing Risk Guidelines with calibration
- Experienced and Diverse Personnel

How did Progress Energy Implement ERM?

- Risk Mapping
 - ◆ likelihood and severity
- Systems Development
 - ◆ Risk Analytics
 - ◆ Trading Deal Capture
 - ◆ Credit
- Benchmarking
- Internal Education
 - ◆ Describe ERM and its application
 - ◆ Unique approaches in discussing risk management
 - ◆ Road Trip

Education Example – Road Trip



Beginning: Raleigh, NC

Ending: San Diego, CA

Total of 2,690 miles

Aunt Clarice or Business Meeting?

- Business Meeting
 - ◆ If you attend this meeting you are pretty sure you will receive at least \$750 in consulting work and you believe there is some chance you may get as much as \$3,000 worth of work. You expect \$1500
- Rich old aunt in Dallas
 - ◆ You heard from a family member that she mentioned giving \$4,000 or more inheritance to those who have been good to her
 - ◆ You think there is a 50% chance you could get a \$2000 inheritance if you stopped by and spent the day with her. It might be a lot more.
 - ◆ If you stop to see old Aunt Clarice you will not make your business meeting



Vehicle Choice

- 2000 Subaru (with 43,000 miles)
 - ◆ Depreciation \$400
 - ◆ 26 mpg, 10% chance of car repairs \$1300
 - ◆ 5% chance of \$250 speeding ticket
- 1973 Mustang (with 77,000 miles)
 - ◆ Appreciation of \$1200. San Diego premium for rag tops
 - ◆ 15 mpg, 50% chance of car repairs \$1300
 - ◆ 30% of \$240 speeding ticket, new tires \$550 required



Education Example - Choices

1. Take the Subaru & visit Aunt Clarice
2. Take the Mustang & visit Aunt Clarice
3. Take the Subaru & attend the business meeting
4. Take the Mustang & attend the business meeting

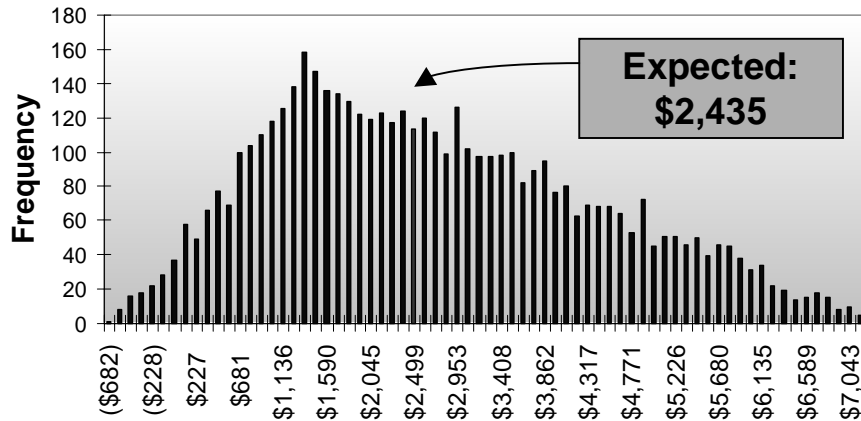
You instinctively do risk management each day, but you may not properly consider the range of outcomes.

Education Example - Summary of the Economics

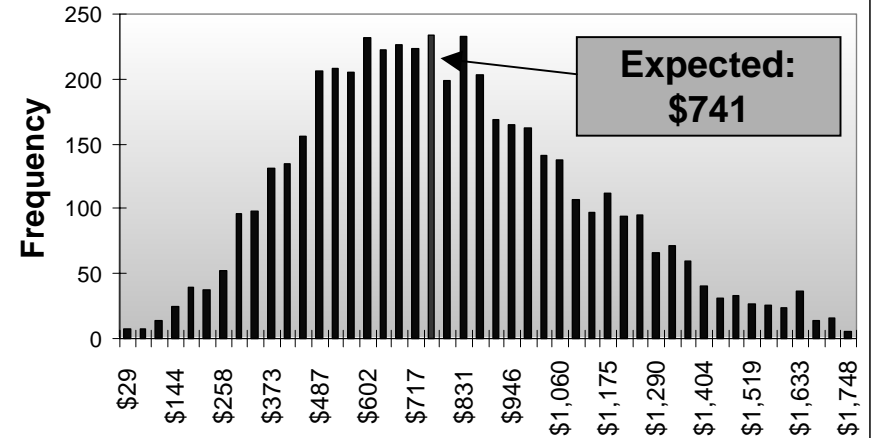
	OPTION ONE	OPTION TWO	OPTION THREE	OPTION FOUR
Business Choice Revenue	\$4,000	\$4,000	\$3,000	\$3,000
Car Choice Revenue	<u>\$0</u>	<u>\$1,200</u>	<u>\$0</u>	<u>\$1,200</u>
Total Revenue	\$4,000	\$5,200	\$3,000	\$4,200
Set of Tires	\$0	\$550	\$0	\$550
Speeding Ticket	\$250	\$250	\$250	\$250
Vehicle Repair	\$1,300	\$1,300	\$1,300	\$1,300
Depreciation	\$400	\$0	\$400	\$0
Fuel	<u>\$166</u>	<u>\$287</u>	<u>\$166</u>	<u>\$287</u>
Total Costs	\$2,116	\$2,387	\$2,116	\$2,387
Net Income @ 100%	\$1,884	\$2,813	\$884	\$1,813
Net Binomial Income	\$1,292	\$1,638	\$792	\$1,138

Education Example - Probabilities

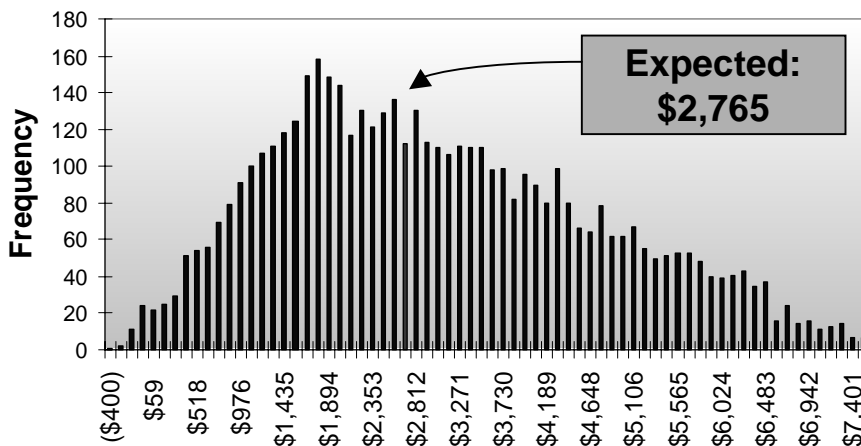
Subaru & Visit Aunt



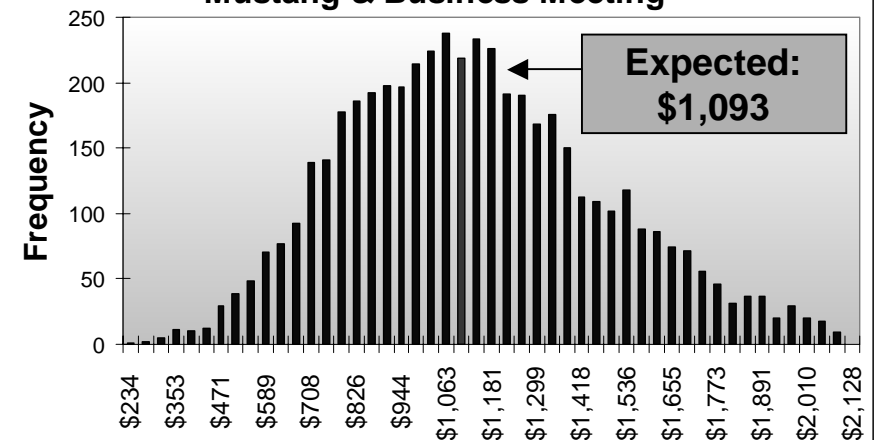
Subaru & Business Meeting



Mustang & Visit Aunt



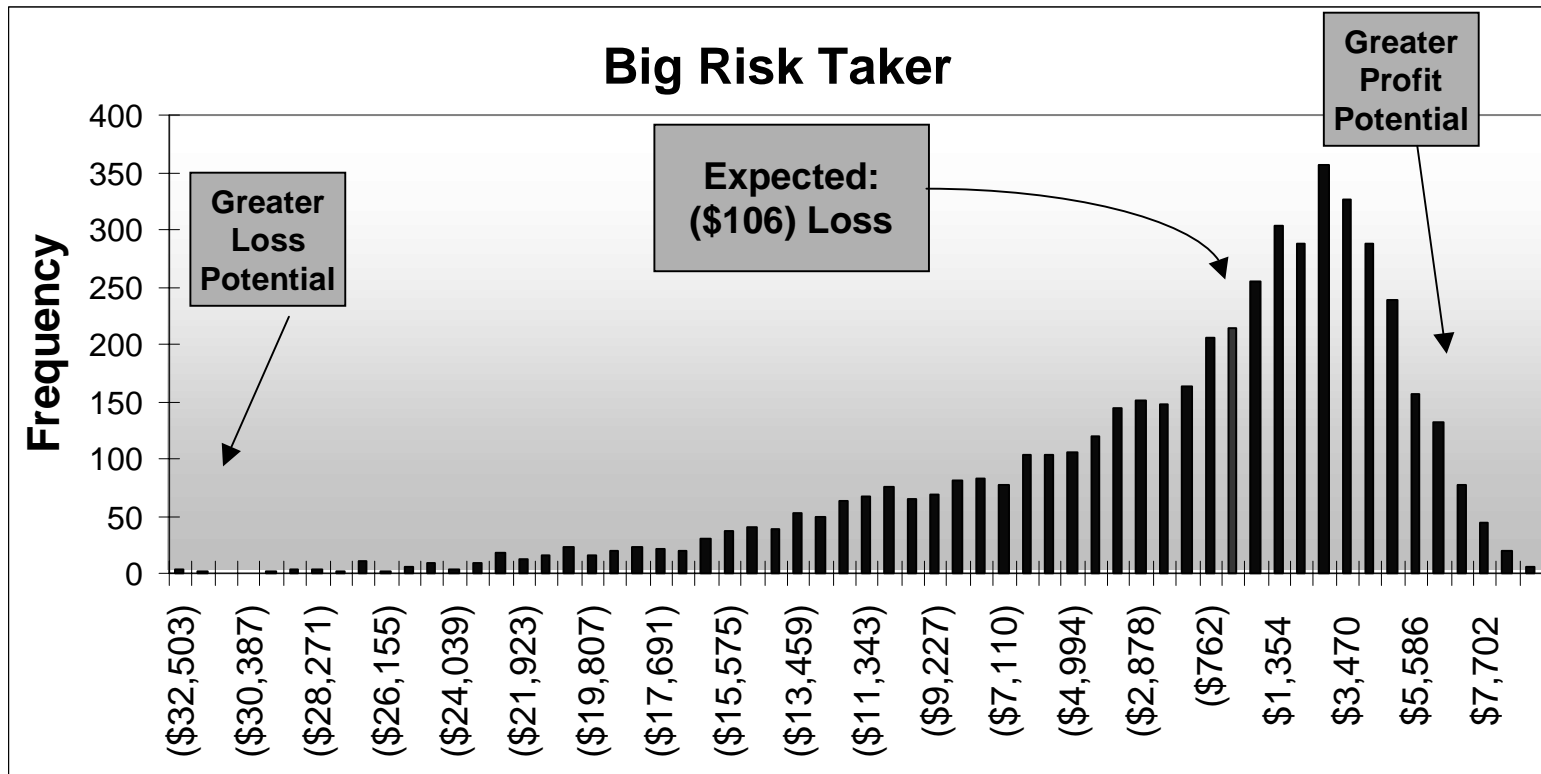
Mustang & Business Meeting



Best Choice?

- What is your risk appetite?
 - ◆ Risk averse?
 - ◆ You have insurance policies and you weigh the risks before making decisions (cannot afford losses)
 - ◆ Risk neutral?
 - ◆ Choose the option that provides you the best expected “average” outcome is the one you choose
 - ◆ Risk taker?
 - ◆ You tend to go after the big prize regardless of the risk involved

Education Example – Pin Hole Risk



Not buying \$550 tires is a risk that you cannot afford!

How to Implement ERM?

Keys to Success

- Start early with realistic goals
- Obtain *explicit* Senior Management support
 - ◆ Codify in a policy
 - ◆ Consequences for violations
- Link risk objectives to enterprise performance
 - ◆ Risk management vs. risk elimination
 - ◆ Earnings, credit & capital adequacy
- Pick your battles carefully - not too much at one time
- Share learning experiences
- Accept change