Making Investment Decisions During the Environmental Policy Debate

Presentation to: Harvard Electricity Policy Group

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$18B assets, 300 investments, $28B in volume since 2004

Across energy spectrum
- Renewables
- Power
- Midstream
- Oil & Gas

Across capital structure
- Financing & Investing

Across geographies
- North America, Europe, Latin America, Australia, India

Diverse portfolio; aligned with GE’s industrial segments
- Renewable Power 32%
- Thermal Power 32%
- Oil & Gas 36%
- Debt ~36%
- Equity ~64%

Going strong for 30+ years … core to GE
Investment strategy was driven by transaction structure

Underwriting focus on “project finance model” to cut transaction costs, given certainty of revenues:

a. Long-term contract with utility offtake
b. Adequate subordinated capital
c. Strength of regulatory regime – rule of law
d. Inherent asset value

GE invested at lower cost of capital for term matching asset’s life

Generally, left technology decisions to utilities and state regulators
Trend: impose regulatory risk on asset owners, assuming it can be passed to load through rational market behavior.

But short-term markets for long-lived assets create imperfect signals, especially for power, which cannot be withheld or stored.

Investors forced to consider:
- Relative fuel costs
- Trends for load growth
- Policy trends and consumer views
- Hedging; risk mitigation
- Potential for long-term upside to offset risks?
All power technologies carry risk of environmental regulatory change

- **COAL**: SOx and NOx drive coal supply choices (NAPP, CAPP, PRB); can scrubber costs be recouped? Will policies eliminate coal in energy mix?

- **GAS**: Technical obsolescence reducing ability to compete; invest in peakers (flexible, but limited hours) vs. CC (baseload, high capital cost); Will policies reduce role of gas in energy mix?

- **RENEWABLES**: How many thermal asset retirements? Sufficient grid support from thermals to limit economic curtailment? Increased focus on endangered species/community opposition to siting
1. **Stay diversified**  
Portfolio approach with eye toward “self-hedging”

2. **Find “fee for services” opportunities**

3. **Forecast revenues based on margin, not Capacity Factor**

4. **Invest higher in capital structure**

5. **Keep acquisition costs low; amortize over shorter life**

6. **Risk-weight target return appropriately. Not every deal gets done**

Oil and gas reserve segment paired with legacy coal investments; large renewables portfolio, partially dependent on US tax credits

Midstream pipeline investments

Well-located assets with strategic advantage, e.g. Linden, NJ

Lending to merchant asset sponsors

“Catch the keys”

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Rational responses driven by underwriting fundamentals