

Making Investment Decisions During the Environmental Policy Debate

Presentation to: Harvard Electricity Policy Group

Brian Ward
Chief Risk Officer, GE Energy Financial Services
Sept. 27, 2013



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

Across energy spectrum



Renewables



Power



Midstream



Oil & Gas

Across capital structure



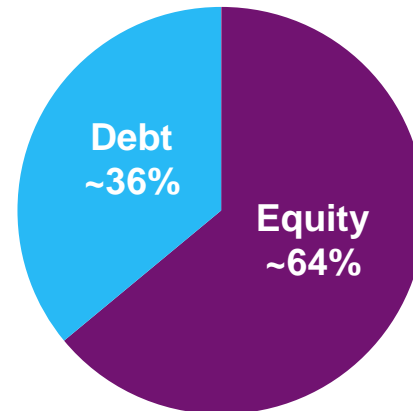
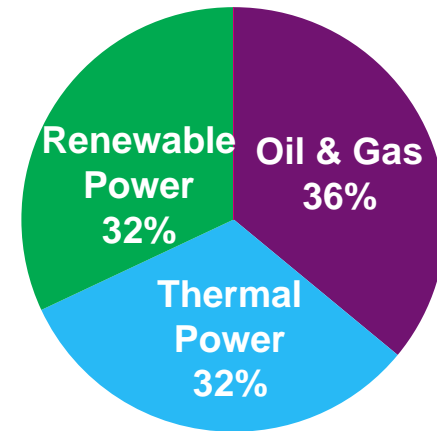
Financing & Investing

Across geographies



North America, Europe, Latin America, Australia, India

Diverse portfolio; aligned with GE's industrial segments



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



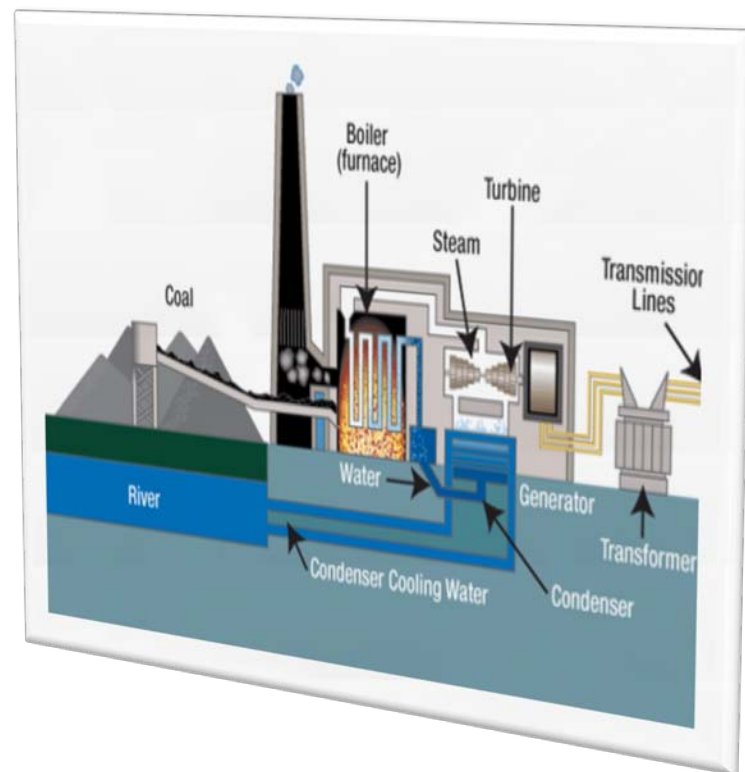
Move to Organized Markets has Changed Underwriting Analysis

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: SO_x and NO_x 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**
Oil and gas reserve segment paired with legacy coal investments; large renewables portfolio, partially dependent on US tax credits
Midstream pipeline investments
3. **Forecast revenues based on margin, not Capacity Factor**
Well- located assets with strategic advantage, e.g. Linden, NJ
4. **Invest higher in capital structure**
Lending to merchant asset sponsors
5. **Keep acquisition costs low;** amortize over shorter life
“Catch the keys”
6. Risk-weight target return appropriately. **Not every deal gets done**

Rational responses driven by underwriting fundamentals