National Conference of State Legislatures: Energy Supply Task Force
November 17, 2025

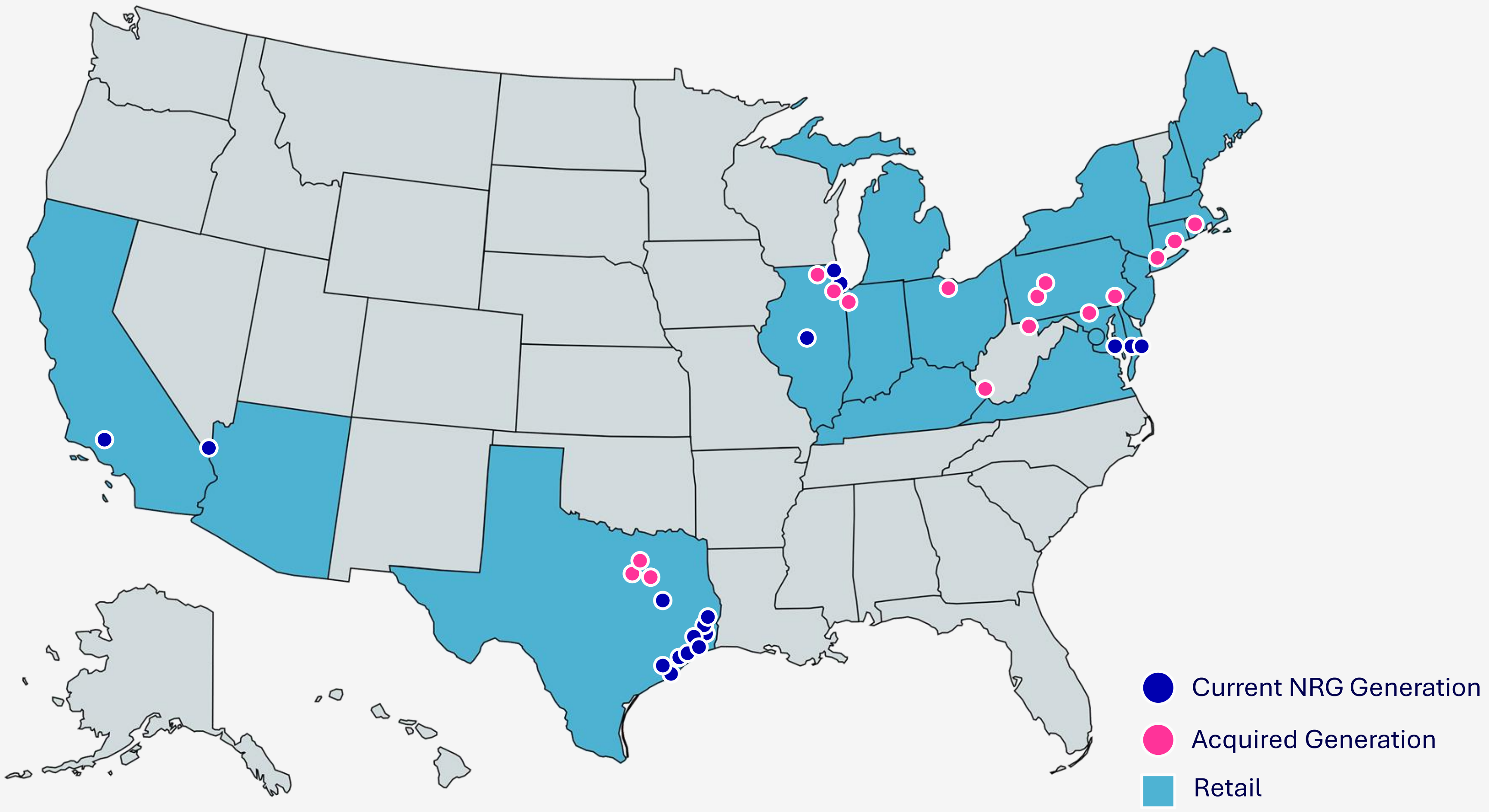
FINANCING 101: PAYING FOR NEW ENERGY GENERATION PROJECTS

Travis Kavulla, Vice President of Regulatory Affairs
NRG Energy

OVERVIEW

- There are two business models for power generation in the United States
  - “merchant” where generators derive revenue from markets and voluntary customer contracts
  - “utility” where government regulators decide what power generation should be acquired and charged to customers through rates they are obligated to pay
- The merchant model creates optionality to deploy generation where market price signals and customer interest justify investment
- Merchants bear the risk of their investments, insulating customers from “bad bets”
- Various states have decided to introduce additional supports to encourage or mandates to compel new generation investment in parallel to competitive markets

NRG HAS A SIGNIFICANT GENERATION FOOTPRINT, AND HAS DOUBLED DOWN WITH ACQUISITION OF LS POWER



MERCHANT GENERATOR VERSUS UTILITY

Competitive Merchant Generation

- Revenue from market / customer power purchase agreements
- Profit a function of market pricing vs cost, and customer willingness to pay
- Capital structure a function of optimal capital cost (more leveraged than utilities)
- Optionality across restructured markets (Texas vs Pennsylvania-Jersey-Maryland RTO)
- Development capital at risk

Utility Monopoly Generation

- Captive customer base charged rates for generation
- Profit a function of total cap-ex & equity thickness
- Utility incentive to maximize equity in cap structure for greater profit (~50% equity)
- Generation investment confined to service territory, little optionality
- Construction Work in Progress charged to ratepayers in some states

NRG'S PARTNERSHIP WITH GE VERNOVA AND KIEWIT

U.S.-Based Fully Integrated Venture

Signed Project Development Agreement

GE Vernova, Kiewit-TIC, NRG: Developer, Operator, OEM and EPC Venture

Benefits

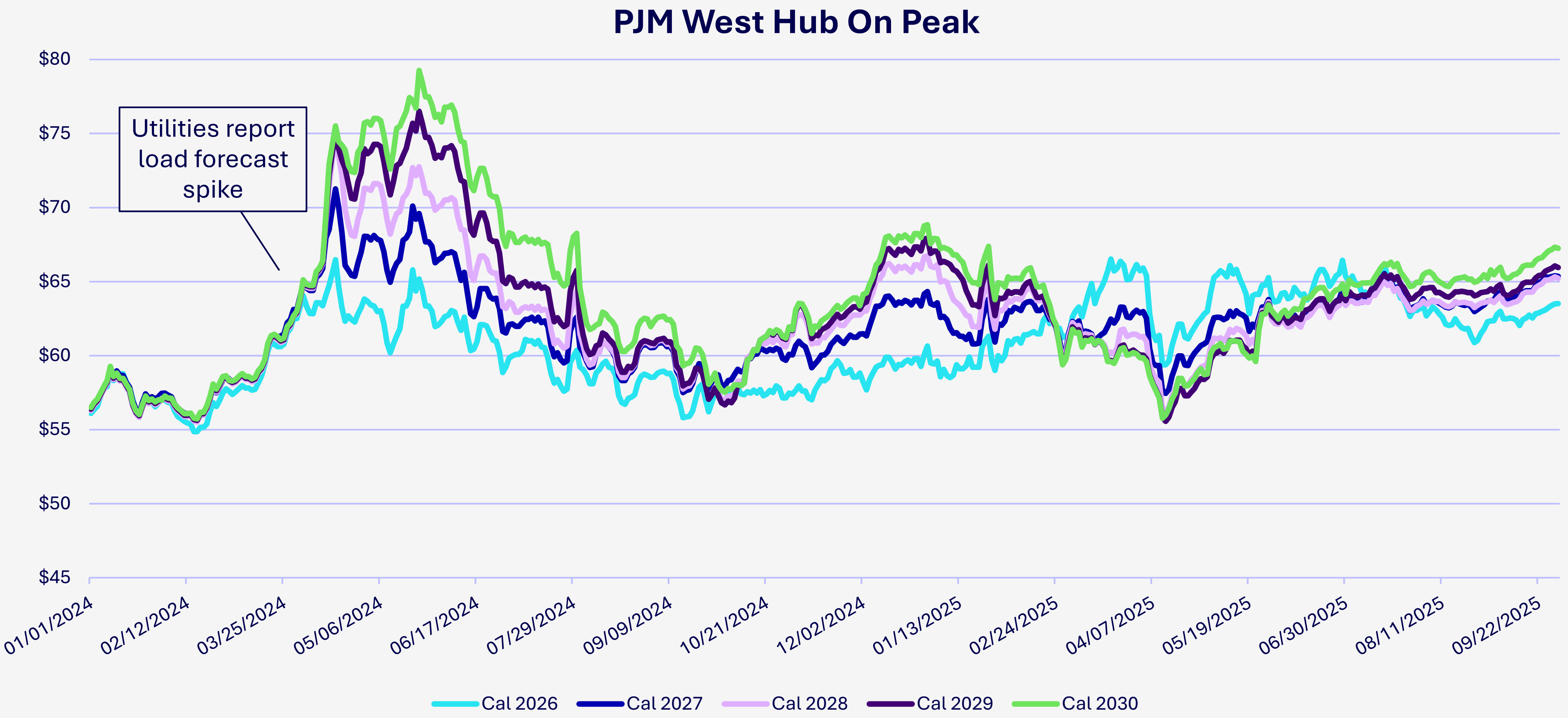
- ✓ Coordinated development, power equipment and EPC delivery
- ✓ GEV - #1 Power OEM Globally
- ✓ Kiewit – Most experienced EPC for GE-H class projects
- ✓ NRG – Leading gas and power platform for large energy customers

Status

- ✓ 1.2 GW CCGTs in-service by 2029
- ✓ 1.2 GW CCGTs in-service by 2030
- ✓ Additional 3.0 GW CCGTs coming online 2030-2032
- ✓ Development activities in progress across all sites

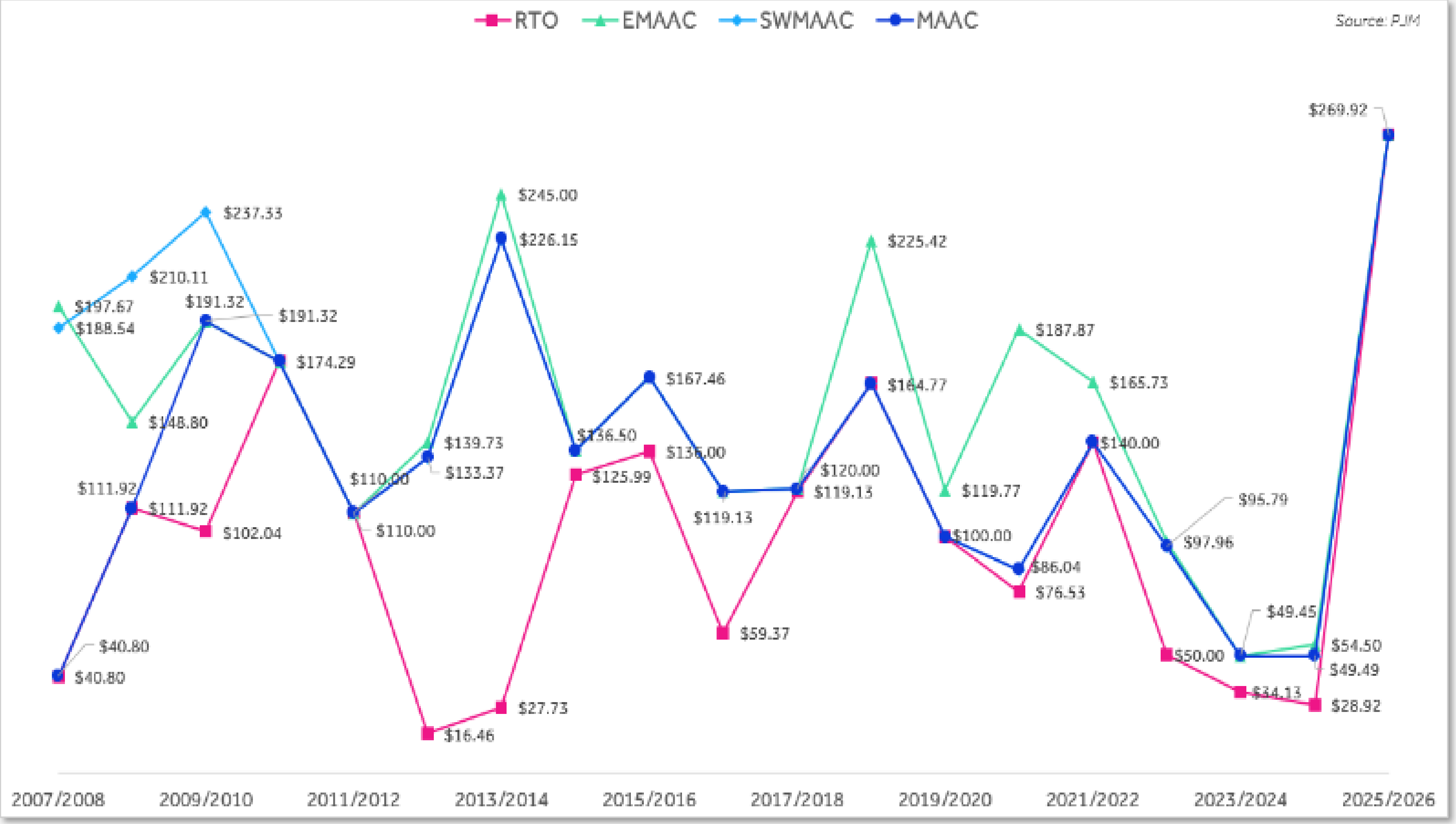
Improving Speed-to-Market

PJM ENERGY MARKETS ARE NOT REFLECTING THE LOAD FORECASTS

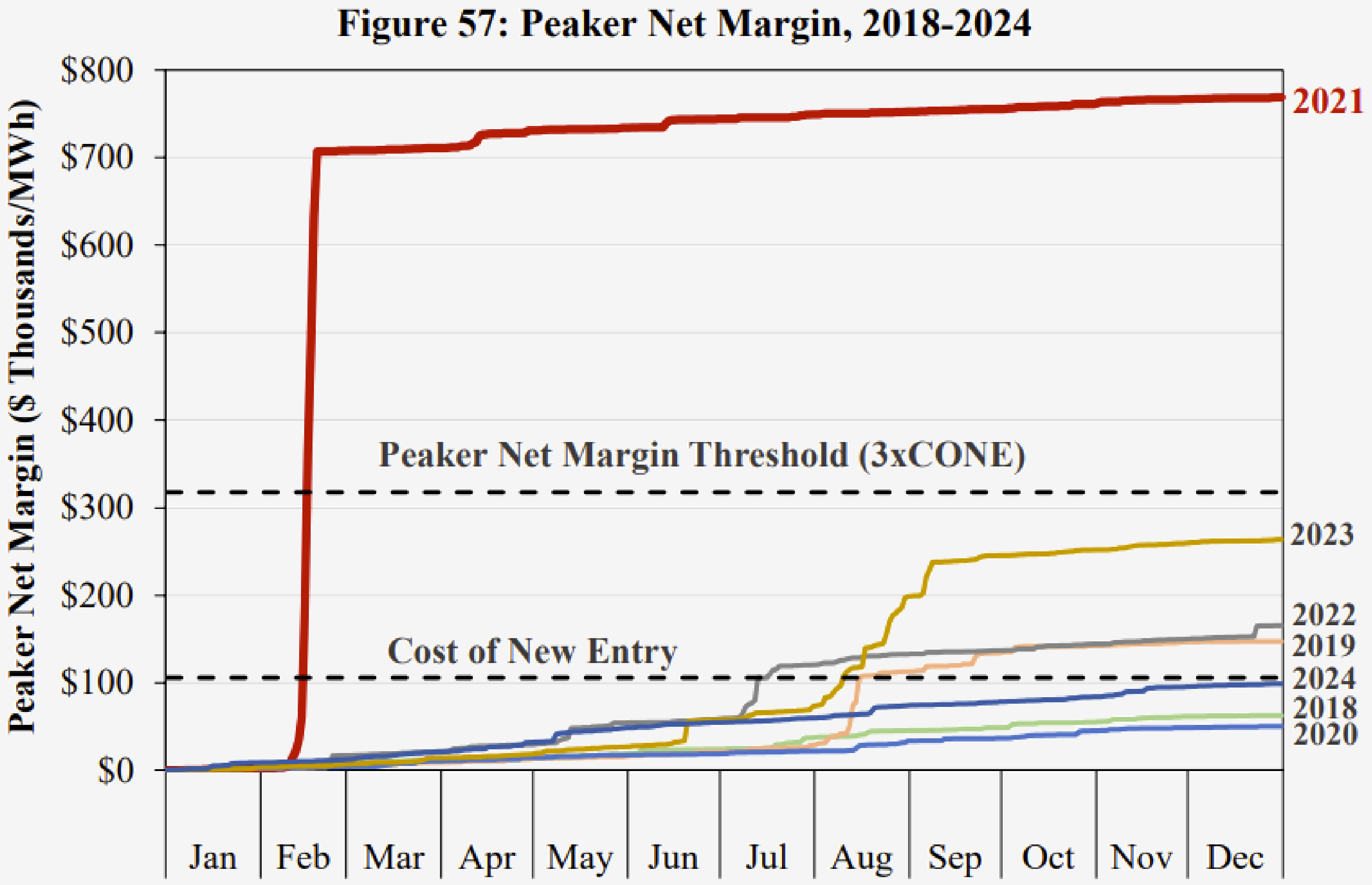


Trading for forward years doesn't suggest the scarcity indicated by ***administrative*** projections of demand/supply

CERTAIN REGIONS HAVE A 'CAPACITY' MARKET IN ADDITION TO AN ENERGY MARKET



TEXAS MARKET AN ‘ENERGY-ONLY’ MARKET, WITH GENERATORS PAID *ONLY* WHEN THEY PRODUCE



BILATERAL MARKETS & OTHER SOURCES OF POWER PLANT REVENUE

- Revenue from customer power purchase agreements / "Bring Your Own Generation"

Constellation to Launch Crane Clean Energy Center, Restoring Jobs and Carbon-Free Power to The Grid

Constellation signs its largest-ever power purchase agreement with Microsoft, a deal that will restore TMI Unit 1 to service and keep it online for decades; add approximately 835 megawatts of carbon-free energy to the grid; create 3,400 direct and indirect jobs and deliver more than $3 billion in state and federal taxes

- Most suppliers to end-use customers desire a "hedge," matching
  - power plant production + costs with
  - customer consumption + revenue

- Virtual Power Plant (VPP) technology investments work according to same logic as large-scale power plants, e.g.,
  - NRG sells to customer at fixed cents/kwh rate but
  - offers rebate to customer to 'flex' the customer thermostat or home battery when wholesale market rises significantly above the retail rate

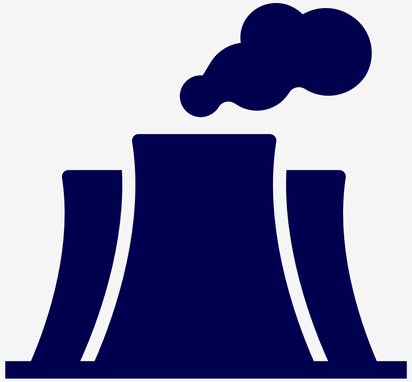
FINANCING

NRG Equity

- 40% financed from cashflows, in NRG's case shareholders of publicly traded stock
- Wear risk of construction cost overruns

Debt

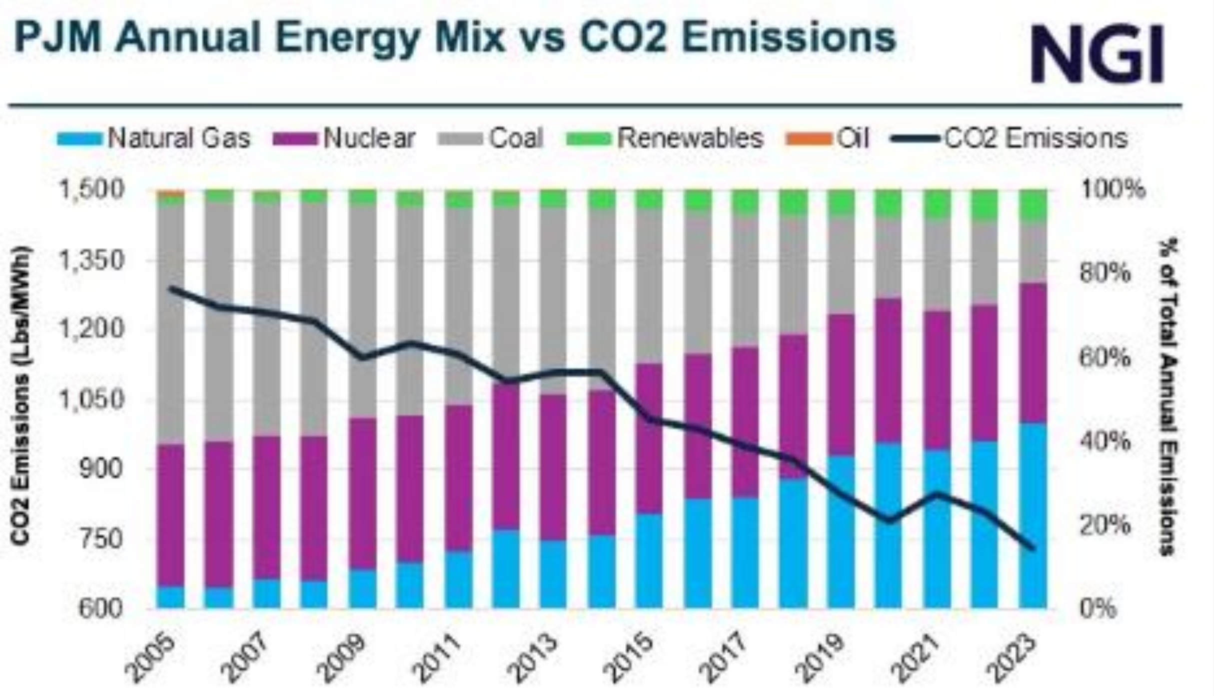
- Commercial banks
- Construction + 5-7 years tenor
- Typically, ~60% leverage



New GenCo LLC

- Has a Power Purchase Agreement or Toll to provide revenues at least adequate to cover debt, with potential upside to equity
- If default, debtors foreclose and own the project

BAD DECISIONS GET PUNISHED + MARKETS CAN WORK FAST



Note: Carbon dioxide emissions are measured in pounds per megawatt-hour. CO2 emission data is based on estimates from PJM.

Source: NGI calculations based on PJM Interconnection LLC data

Lincoln Power files for bankruptcy after $38.9M PJM charge for failing to run during Winter Storm Elliott

Nautilus Power, another generator Cogentrix Energy manages, on Friday sought Federal Energy Regulatory Commission protection from nonperformance penalties.

Published April 3, 2023

Ethan Ho

Senior R

Energy groups scrap Texas-backed projects as costs rise

Developers … d soars

Carlyle's risk increases from its gas-fired power plants

Rush for US gas plants drives up costs, lead times

By Mark Shenk

July 21, 2025 11:18 AM CDT · Updated July 21, 2025

Clean Energy Is Canceling Gas Plants in the US

October 3, 2020 | Mega Trends & Analysis

$2.2 billion solar pl… California scheduled to be turned off after years of wasted money: 'Never lived up to its promises'

By Michael Kaplan

Published Sep. 23, 2025, 4:52 p.m. ET

542

SOME OTHER PERMUTATIONS

California has an Integrated Resource Plan (IRP) requirement that requires competitive suppliers to sign long-term contracts with generation

Texas Energy Fund provides low-interest loans (10 GW, up to $10B), up to 60% leverage, in exchange for new dispatchable generation, prohibition on behind-the-meter data center deals, and strong performance requirements

Utah SB 132 (2025) allows large customers to self-supply power generation outside of traditional utility monopoly in the state

Travis Kavulla

Vice President, Regulatory Affairs

NRG Energy

(406) 788-3419

travis.kavulla@nrg.com