# Impact Of AI's Energy Consumption On Dominion Energy's (NYSE: D) Stock Price

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Agenda

- Thesis
- Assumption Model & Data
- Results
- Key Findings
- Conclusion

Thesis

- AI Energy demand has a statistically significant but complex impact on Dominion Energy's stock price

- Key Drivers
    - Surging Data Center Power Demand (+160% by 2030)
    - $50.1 Billion Infrastructure Investments

    - Problem
        - Despite growth in AI energy, $D fell 26.4% (2015-2025)


Data Center Demand (TWh) 2014-2024
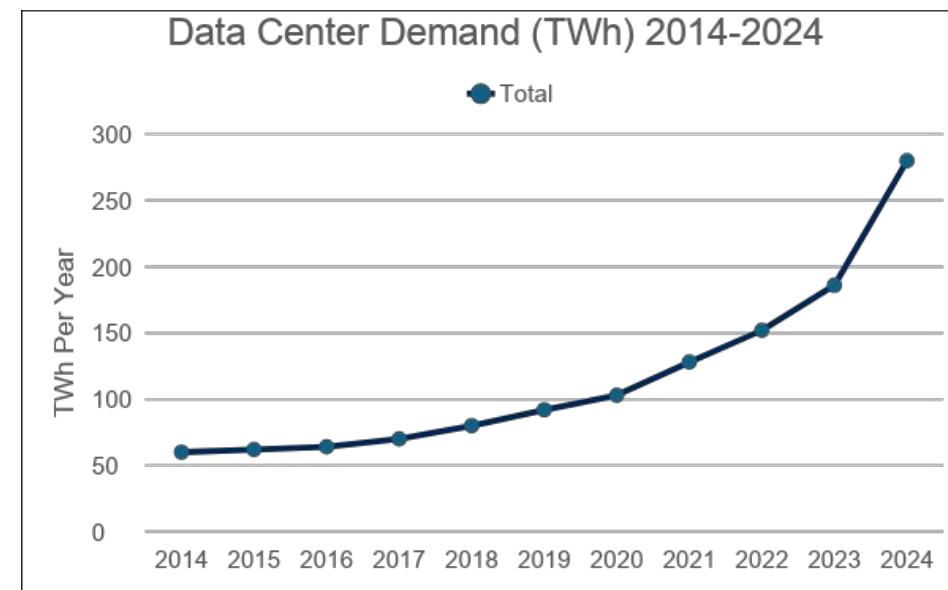
Assumption(s)/Model/Data(s)

- Data Sources
  - Stock Monthly Closing Prices (2015-2025)
  - Peak – $85.75 (Jan 2020)
  - Low - $40.32 (Oct 2023)
  - Financial Metrics
    - EPS = $0.65 / Rev = $3.4 B (+10.1% YoY)
- Methodology
  - Regression Analysis
    - AI energy demand vs Stock Returns
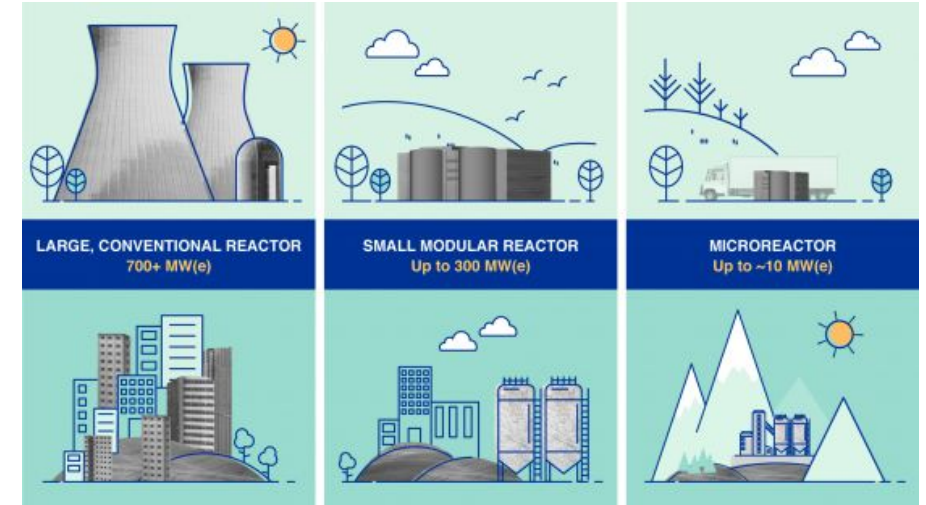 - Event Studies
    - Data Center Announcements
    - Capex Plans

NYSE: D Price (2015-2025)

Result

- Regression Analysis
  - Strong Inverse Relationship
  - +1 TWh AI energy demand = - $0.13 stock price ($p < 0.05$)
  - Model Fit
    - R^2 = 0.5788
  - Correlation
    - -0.76 (AI Energy Demand + Stock Returns)

Comparing TWh to D Price 2014-2024
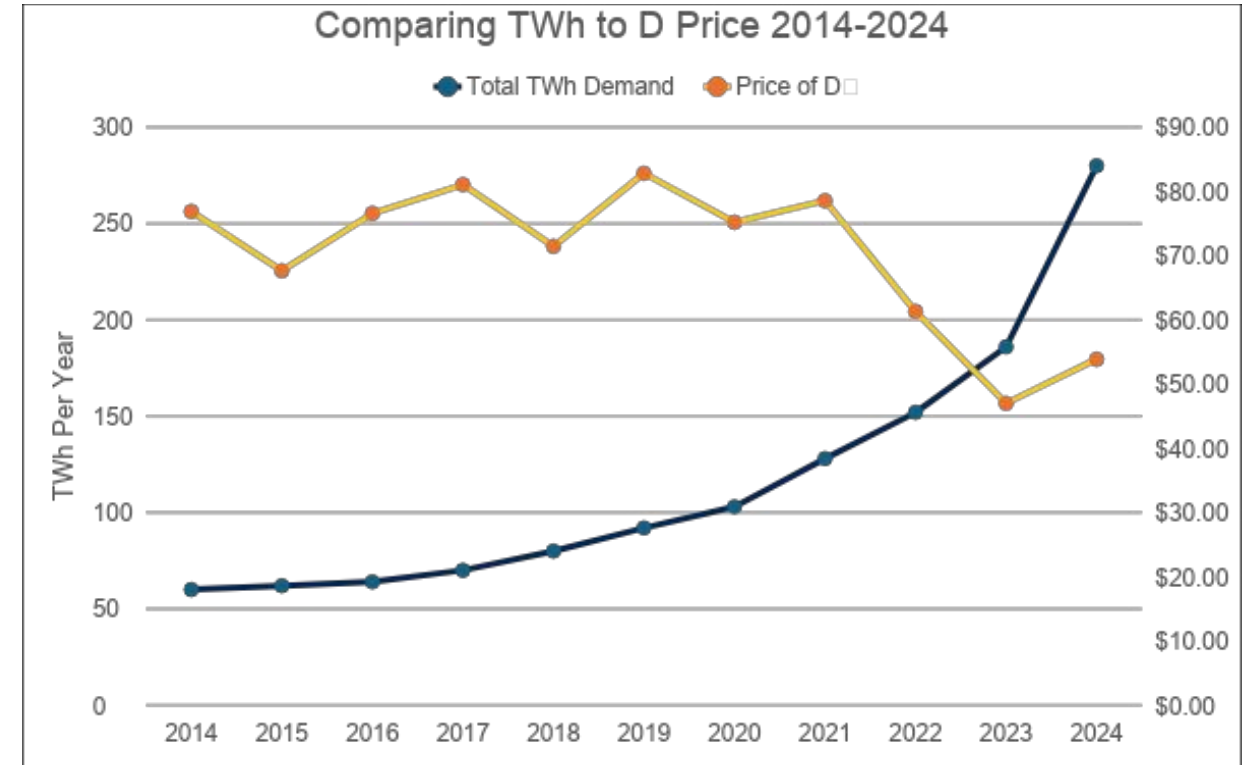
Key Findings

- Event Impacts
  - $50.1 Billion capex plan -> 3.2% spike (Jan 2025)
  - 15 New Data centers -> 2.4% monthly price jumps
- Amazon Effect
  - - $15 after announcement ($35 Billion)
  - Amazon Partnership -> Nuclear -> Net 0 Carbon Emissions

LARGE, CONVENTIONAL REACTOR 700+ MW(e)

SMALL MODULAR REACTOR Up to 300 MW(e)

MICROREACTOR Up to ~10 MW(e)

Conclusion

- Importance of AI
  - Monitor Data Center developments
  - Infrastructure Execution
- Final Takeaway
  - Dominion's growth potential hinges on balancing AI-driven demand with sustainable investments.
  - $D = A * TWh$

Dominion Energy®

Thank You

Appendix

Access Link to Research Paper