

Initiating Coverage:

# Constellation Energy

A Constellation of Opportunity Awaits

**Key Take-away:** Constellation Energy is well-positioned to capitalize on the growing demand for stable carbon-free energy driven by AI and cloud computing growth. With 86% of its energy production coming from nuclear plants, Constellation is the leading player in the shift towards renewable and reliable energy. The company boasts superior operational efficiency in the nuclear subsector, providing a competitive edge.

**Recent acquisitions and partnerships:** Constellation Energy recently announced a \$26.6B deal to acquire Calpine, the nation's largest natural gas producer. The company also secured a landmark 20-year deal with Microsoft to power its data centers through the reopening of Three Mile Island Unit 1, a previously closed nuclear reactor. The company landed over \$840 million of contracts from the U.S. government and will be supplying 13 government divisions with renewable energy over the next 10 years. A major agreement with Amazon is rumored as well.

**Clean energy transition to power AI growth:** The rapid rise of AI and hyperscalar cloud computing is driving a surge in total energy demand. Projections show U.S. data center energy demand could double by 2030. Many big tech companies are preparing for the future by securing stable, long-term energy solutions. Nuclear energy is seen as the best source, with natural gas as a close second. In general, corporations see clean energy is seen as more sustainable, especially as there is more and more pressure to be more green. ESG regulation is ramping up and investors and stakeholders are becoming more climate conscious. Nuclear and natural gas production stand to benefit from these macro tailwinds.

**Valuation:** We initiate coverage with a \$284 PT.

Consortium Equity Research  
Energy | Renewables  
March 7<sup>th</sup>, 2025

Stock Rating: Overweight

Price Target: \$284

Price: \$212.54

Potential Upside: 33.6%

Ticker: \$CEG

Market Cap: 68.32b  
Shares Outstanding: 313mm  
Free Float (%): 99.8%  
Dividend Yield: 0.61%



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## Peer Comparisons

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### Comparable Companies

\$mm

Name	Mkt Cap	EV	P/E LTM	Revenue LTM	EBITDA LTM
Vistra	\$ 38,750	\$ 57,430	16.3x	\$ 17,224	\$ 2,659
Duke Energy	\$ 90,180	\$ 175,060	21.4x	\$ 30,357	\$ 8,637
NextEra Energy	\$ 149,758	\$ 224,860	21.6x	\$ 24,753	\$ 13,782
Constellation Energy	\$ 64,978	\$ 70,370	17.5x	\$ 23,568	\$ 6,123

Name	LTM EV/EBITDA	Gross Margin	EBITDA Margin	EBIT Margin	Debt/Equity
Vistra	21.6	57.7%	15.4%	14.2%	311.0%
Duke Energy	20.3	50.1%	28.5%	30.1%	166.0%
NextEra Energy	16.3	60.1%	55.7%	18.0%	137.0%
Constellation Energy	11.5	0.0%	26.0%	16.5%	66.5%

Sources: Mergent, Yahoo Finance

## Company Overview

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**Company Description:** Constellation Energy is the largest producer of clean, carbon-free energy in the United States, with a dominant focus on nuclear power. Headquartered in Baltimore, Maryland, the company serves around 2 million customers. Constellation maintains a diversified portfolio that includes natural gas, wind, solar, and hydroelectric assets, allowing it to serve a broad range of clients from government agencies to Fortune 500 companies. The company was spun off from Exelon in 2022.

**Nuclear Energy Dominance:** The company generates 86% of its energy from nuclear power plants. Constellation operates 25 nuclear plants, supplying over 25% of the nation's nuclear power. The second highest energy source is natural gas, which accounts for 11%, followed by a collection of wind, solar, hydro, etc. which account for the remaining 3% of energy production. Natural gas production is set to become a much larger portion of its production with the recent \$26.6B acquisition of Calpine, the nation's largest producer of natural gas.

## Industry Overview

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**Increased power demand driven by the AI Boom:** The rapid rise of AI and hyperscalar cloud computing is driving a surge in total energy demand. Projections show U.S. data center energy demand could double by 2030. Many big tech companies are preparing for the future by securing stable, long-term energy solutions. Nuclear energy is seen as the best source, with natural gas as a close second.

**The Rise of Nuclear Energy:** A year ago, no one was talking about nuclear energy. The energy source is back in the discussion as reliability is the most sought-after quality in an energy source. At over 90% capacity factor, it is the highest yielding renewable energy source, and a stable one that many big tech firms are fighting to lock down.

**Developments in Natural Gas:** While nuclear gains momentum, natural gas remains a key transitional energy source, especially with advancements in Liquefied Natural Gas (LNG) technology that allow gas to be cooled and stored efficiently. Natural gas provides critical backup for renewable generation and is

often the default option when wind and solar falter. Recognizing this, companies like Constellation Energy are diversifying to ensure they are not overly reliant on any one source. Their recent \$26.6 billion acquisition of Calpine, the nation's largest natural gas producer, positions them to serve both nuclear-focused hyperscalars and companies seeking more traditional, flexible energy solutions.

## Investment Theses

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### **Thesis 1: Constellation Energy is well-positioned to capitalize on AI-driven power demand and the clean energy transition.**

As AI and cloud growth reaches unprecedented levels, the demand for total energy is rapidly rising. As traditional energy sources are unable to keep up and sustainability is becoming a larger issue, big tech companies are increasingly prioritizing stable, scalable, and carbon-free energy sources. Nuclear power is being preferred: AWS bought a nuclear power plant in Pennsylvania in 2023, and Microsoft just signed a deal with Constellation. In this 20-year deal, Microsoft will purchase all energy output from Mile Island Unit 1, which Constellation is reopening. Amazon is eyeing a massive deal with Constellation as well. Nuclear is generally considered a more stable energy source and the future backbone of tech growth. Nuclear energy is the least susceptible to price and demand volatility out of any energy source, and with plants running 24/7, it isn't weather-dependent like wind or solar. Additionally, Uranium, the fuel source, is stockpiled years in advance and isn't geopolitically sensitive like oil and gas. As Constellation Energy's nuclear energy production makes up 86% of its total energy output, the company is well-positioned to meet this demand.

It is still possible that a different renewable energy source rises to the top in the next few years. Wind and solar are being practically shutdown by Trump (For example, Trump halted all offshore wind leases, causing BP to divest all of its existing US offshore wind turbines), so the general consensus is that natural gas could compete with nuclear. Especially with developments in LNGs (Liquified Nitrogen Gas), natural gas can now be cooled and stored at 1/600<sup>th</sup> of its original volume. CEG's management seems well aware of this possibility, as they recently announced a \$26.6B deal to acquire Calpine, the nation's largest natural gas producer. Even if companies pivot towards natural gas, Constellation is now well-positioned to meet that demand as well. Management has openly spoken about their intentions to not be overly reliant on nuclear and to diversify their energy portfolio.

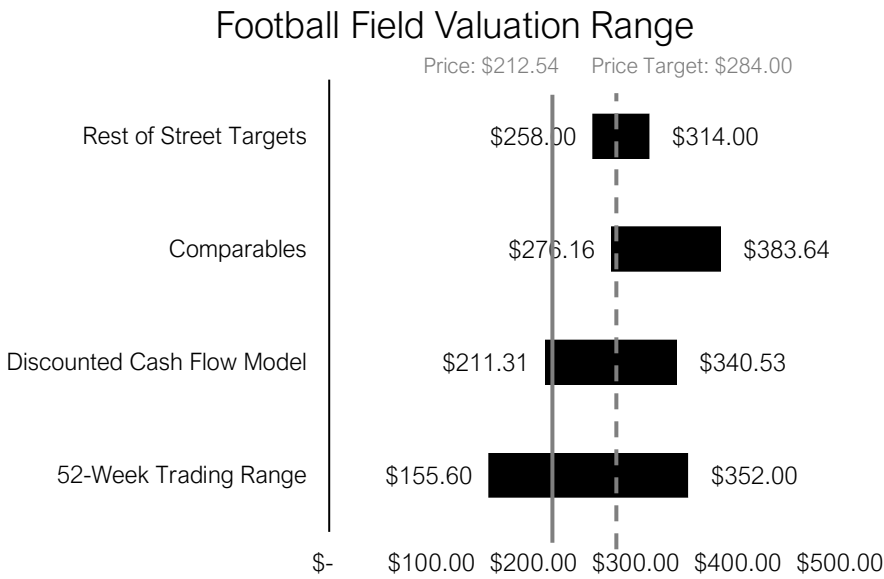
## **Thesis 2: Superior nuclear operational efficiency gives Constellation the ability to dominate new deals and partnerships.**

Two main risk factors when opening a new nuclear plant are major overruns in operations and long-term economic risk (why Mile Island Unit 1 was originally shut down). Constellation addresses both these risks with superior operational efficiency. Constellation currently operates 25 nuclear plants, accounting for over a quarter of all US nuclear energy production. The average refueling duration in these plants is 19 days (21 last year), which is wildly superior to the industry average of 38-40 days. As a result, their plants' capacity factor (the percentage of energy output compared to hypothetically continuously running the plant at full capacity), a key measure of efficiency, has been around 94.6% in the past 3 years, 4% above the industry average.

Their operational efficiency is a competitive moat. The company is already the largest producer of nuclear, natural gas, and renewable energy in general. In Q1 2025, the company received \$840 million out of \$1 billion total funding from the U.S. government and will be supplying 13 government divisions with renewable energy for the next 10 years. In addition, there is the aforementioned deal with Microsoft and rumored partnership with Amazon. As big tech companies strive to snatch up nuclear energy at relatively fixed prices, Constellation is the main player to look towards. CEG's main competitor in Vistra is barely exposed to nuclear power and will be left out of more deals as the transition to renewables continues. While recent deals will already have been priced into the markets, companies willing to deal with nuclear energy will look at Constellation's superior scale and operational efficiency and see it as the most reliable bet on the future. For Constellation, a company whose margins have improved at the expense of top-line revenue and operates in a highly volatile and speculative industry, having this competitive moat to land more deals in the future is reasonable.

Price Target & Valuation

Our analysis gives \$CEG a price target of \$284 and an Overweight rating.



Potential Downsides to Our Rating

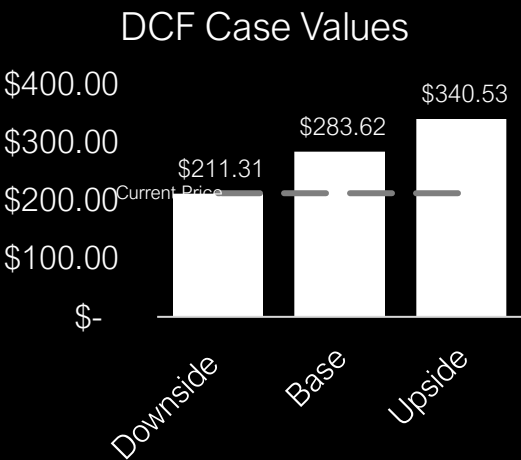
**Downside 1:** As an American company, Constellation is heavily subject to Trump’s anti-green policies. While he has been vocally supportive of nuclear energy and mostly been shutting down offshore wind and solar, there is always a risk that he turns around and starts regulating nuclear more heavily as well. It is unlikely as he has spoken about nuclear energy and fracking as paths to restore the US Energy industry back to dominance, but in a rapidly changing political climate, that risk is always present.

**Downside 2:** The launch of DeepSeek questions the need for more power to supply developments in AI. It challenges the fundamental belief that more computational power leads to more powerful models. However, leaders in AI such as OpenAI have discussed their emphasis on reasoning models, which will take exponentially more computational power than current Large Language Models (LLMs). Constellation’s stock has already dropped ~20% in response to concerns around AI’s future, but the future has not changed. AI will continue to drive energy growth and demand. If anything, this puts Constellation at a cheaper price to enter a position.

Our Price Target: **\$284.00**  
Our PT is based on assumptions that nuclear and natural gas production both increase steadily at industry standards. Nuclear remains Constellation’s main source of revenue, and margins decline slightly.

Our Upside Case: **\$341.00**  
Our upside case is based on expansive growth in both nuclear energy and natural gas production. The assumption is made that Constellation is able to maintain its extremely high margins because of unparalleled demand for their services.

Our Downside Case: **\$210.00**  
Our downside case assumes that nuclear energy production falls apart, and Constellation is forced to heavily pivot to natural gas production. It also assumes that in the process of rapidly transitioning to become a natural gas powerhouse, the company’s margins suffer significantly.



**Downside 3:** A running joke around nuclear energy is that it has always been “5 years away”. The primary barrier to nuclear’s growth isn’t technology, waste management, or efficiency: it’s public perception. Regardless of how enthusiastically big tech companies embrace nuclear energy, broad public resistance could halt progress. In an already highly volatile energy industry, shifting public sentiment could pose a challenge for Constellation.

## Projections

<b>Income Statement (\$mm)</b>	<b>2023A</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>CAGR%</b>
Revenue	23,568	23,210	23,773	25,260	27,801	4.2%
EBITDA	6,755	6,100	6,235	6,610	7,260	1.8%
EBIT	4,055	3,500	3,581	3,801	4,179	0.8%
EBIAT	45	(772)	1,022	825	3,281	192.2%
<b>Margin &amp; Growth Data</b>	<b>2023A</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>AVG%</b>
EBITDA Margin	28.7%	26.3%	26.2%	26.2%	26.1%	26.7%
EBIT Margin	17.2%	15.1%	15.1%	15.0%	15.0%	15.5%
Revenue Growth	-5.4%	-1.5%	2.4%	6.3%	10.1%	2.4%
EBIT Growth	140.8%	-13.7%	2.3%	6.1%	9.9%	29.1%
<b>Valuation Metrics</b>	<b>2023A</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>AVG%</b>
P/FCF	10.7x	11.5x	10.6x	6.9x	6.2x	9.2x
EV/Sales	3.0x	3.1x	3.0x	2.8x	2.6x	2.9x
EV/EBITDA	26.3x	27.3x	26.8x	25.3x	23.1x	25.8x
FCF Yield	9.3%	8.7%	9.5%	14.5%	16.1%	11.6%

## About \$CEG

Constellation Energy (NASDAQ: CEG) is the largest producer of clean, carbon-free energy in the United States, with a dominant focus on nuclear power. Based in Baltimore, Maryland, the company serves around 2 million customers. Constellation maintains a diversified portfolio that includes natural gas, wind, solar, and hydroelectric assets, allowing it to serve a broad range of clients from government agencies to Fortune 500 companies. The company was spun off from Exelon in 2022.

## Disclosures & Ratings

Consortium Equity Research does not hold any professional relationships with any reported equities.

**Overweight** means the analyst team believes the stock price will outperform the coverage industry (Energy and Sustainability) in the next 6-12 months. **Equal Weight** means the team expects performance in line with the industry. **Underweight** means the team expects underperformance relative to the industry.

## Appendix

Constellation Energy  
Discounted Cash Flow

Active Case:	2 Base
Current Share Price	\$212.54

DCF Analysis (\$mm)											
	FY2019 12/31/2019	FY2020 12/31/2020	FY2021 12/31/2021	FY2022 12/31/2022	FY2023 12/31/2023	FY2024 12/31/2024	FY2025 12/31/2025	FY2026 12/31/2026	FY2027 12/31/2027	FY2028 12/31/2028	FY2029 12/31/2029
Stub						0.18	0.18	0.18	0.18	0.18	0.18
Discount Period						0.09	0.68	1.68	2.68	3.68	4.68
Revenue	17,603.00	19,649.00	24,440.00	24,918.00	23,568.00	23,210.00	23,045.96	23,058.32	23,235.49	23,571.70	24,066.97
Revenue Growth	0%	12%	24%	2%	-5%	-2%	-1%	0%	1%	1%	2%
Revenue Breakdown 1	15,138.58	16,898.14	21,018.40	21,429.48	20,268.48	19,700.00	19,336.77	19,166.06	19,181.03	19,380.33	19,767.93
Revenue Breakdown 2	1,936.33	2,161.39	2,688.40	2,740.98	2,592.48	2,800.00	2,996.11	3,175.96	3,334.81	3,468.24	3,572.28
Other Revenue	528.09	589.47	733.20	747.54	707.04	710.00	713.09	716.31	719.65	723.13	726.75
EBIT	294.00	(547.00)	634.00	1,684.00	4,055.00	3,500.00	3,425.50	3,377.54	3,353.32	3,350.94	3,369.38
EBIT Margin	2%	-3%	3%	7%	17%	15%	15%	15%	14%	14%	14%
Tax Expense	249.00	225.00	(388.00)	859.00	774.00	800.00	685.10	675.51	670.66	670.19	673.88
Effective Tax Rate	85%	-41%	-61%	51%	19%	23%	20%	20%	20%	20%	20%
NOPAT	45.00	(772.00)	1,022.00	825.00	3,281.00	2,700.00	2,740.40	2,702.03	2,682.66	2,680.75	2,695.50
D&A	3,636.00	4,540.00	2,427.00	2,514.00	2,700.00	2,600.00	2,572.31	2,564.37	2,574.68	2,602.41	2,647.37
Capex	1,747.00	1,329.00	1,689.00	2,422.00	2,565.00	3,000.00	(1,829.93)	(681.44)	471.64	1,653.53	2,888.04
Changes in NWC	(4,362.00)	(3,540.00)	(5,474.00)	(7,806.00)	(11,174.00)	(6,000.00)	(5,918.37)	(5,882.31)	(5,887.96)	(5,933.04)	(6,016.74)
UFCF	(6,064.00)	(5,641.00)	(6,141.00)	(9,403.00)	(10,458.00)	8,300.00	13,061.02	11,830.15	10,673.66	9,562.67	8,471.57
PV of FCF						8,239.38	12,359.55	10,322.91	8,588.39	7,095.18	5,796.08

### Weighted Average Cost of Capital (\$mm)

Market Risk Premium	4.24%
Beta	1.10
Risk Free Rate	4.32%
Cost of Equity	8.04%
Weighted Average Cost of Debt	4.80%
Tax Rate	20.00%
Cost of Debt	0.41%
Total Equity	\$64,975
Total Debt	\$6,120
Equity/Total Capitalization	89.30%
Debt/Total Capitalization	10.70%
WACC	8.45%

### Terminal Value

#### Exit Multiple Method

2029 EBITDA	\$6,017
EV/EBITDA Exit Multiple	11x
Terminal Value	\$67,388
PV of Terminal Value	45962.04479
PV of Projection Period	\$52,252
PV of Terminal Value	\$45,962
Implied TEV	\$98,214
(-) Debt	\$9,140
(+) Cash	\$3,020
Implied Equity Value	\$92,094
Diluted Shares Outstanding	313
Implied Share Price	\$294.37
Upside/Downside	39%