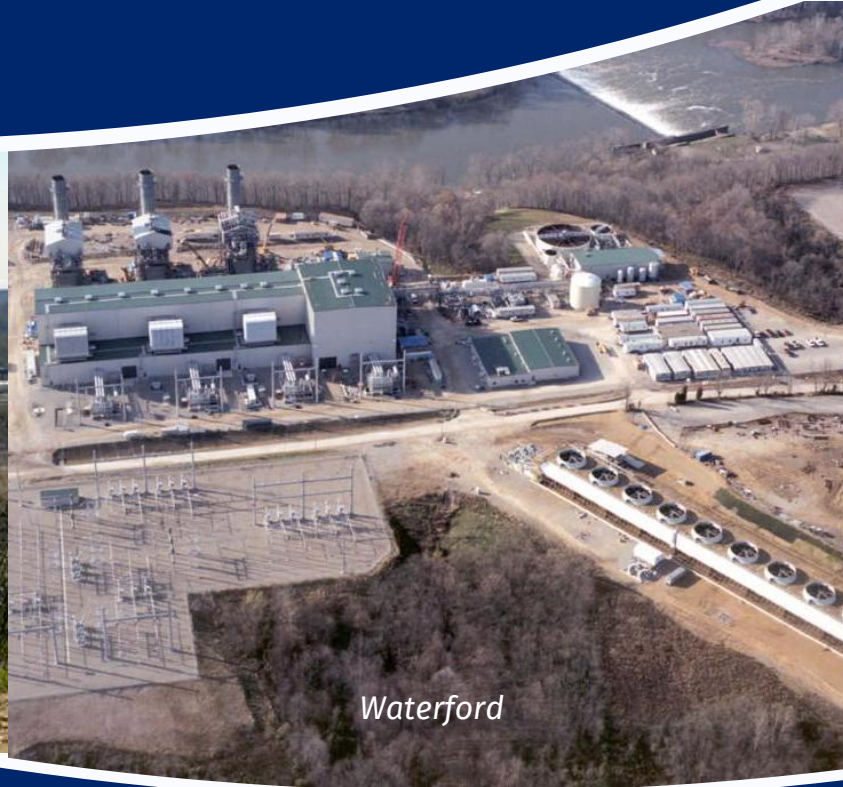




Lawrenceburg



Waterford



Darby

Acquisition of Lawrenceburg, Waterford, & Darby

January 15, 2026

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We include in this presentation Adjusted EBITDA and Adjusted Free Cash Flow, which we use as measures of our performance, and which are not financial measures prepared under U.S. Generally Accepted Accounting Principles (“GAAP”). Non-GAAP financial measures, such as Adjusted EBITDA and Adjusted Free Cash Flow, do not have definitions under GAAP and may be defined differently by, and not be comparable to, similarly titled measures used by other companies or used in our credit facilities, the indentures governing our notes or any of our other debt agreements. Generally, a non-GAAP financial measure is a numerical measure of financial performance, financial position or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with GAAP. Management cautions investors not to place undue reliance on such non-GAAP measures, but to consider them along with their most directly comparable GAAP measures. Adjusted EBITDA and Adjusted Free Cash Flow have limitations as analytical tools and should not be considered in isolation or as a substitute for analyzing our results as reported under GAAP. Due to the difficulty in predicting certain components of Adjusted EBITDA and Adjusted Free Cash Flow for the Lawrenceburg, Waterford, and Darby assets with a reasonable degree of certainty, we are unable to reconcile these non-GAAP financial measures to the comparable GAAP measures without unreasonable efforts.

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Investment Highlights

\$3.45 billion investment in three high-quality assets with immediate >15% Adj FCF/share accretion

- ✓ 6.6x 2027E Adj EBITDA multiple with strong unlevered free cash flow conversion of ~85%
- ✓ Maintains balance sheet strength, ability to achieve <3.5x net leverage target by YE 2026 and continues previously announced SRP¹
- ✓ Diversifies Talen's generation portfolio by both capacity and free cash flow contribution with the addition of ~2.6² GW of efficient natural gas assets
- ✓ ECP support through ~\$900 million³ of consideration in Talen equity
- ✓ Enhances Talen's overall scale, including in western PJM, which has significant data center tailwinds and reliable access to low-cost natural gas

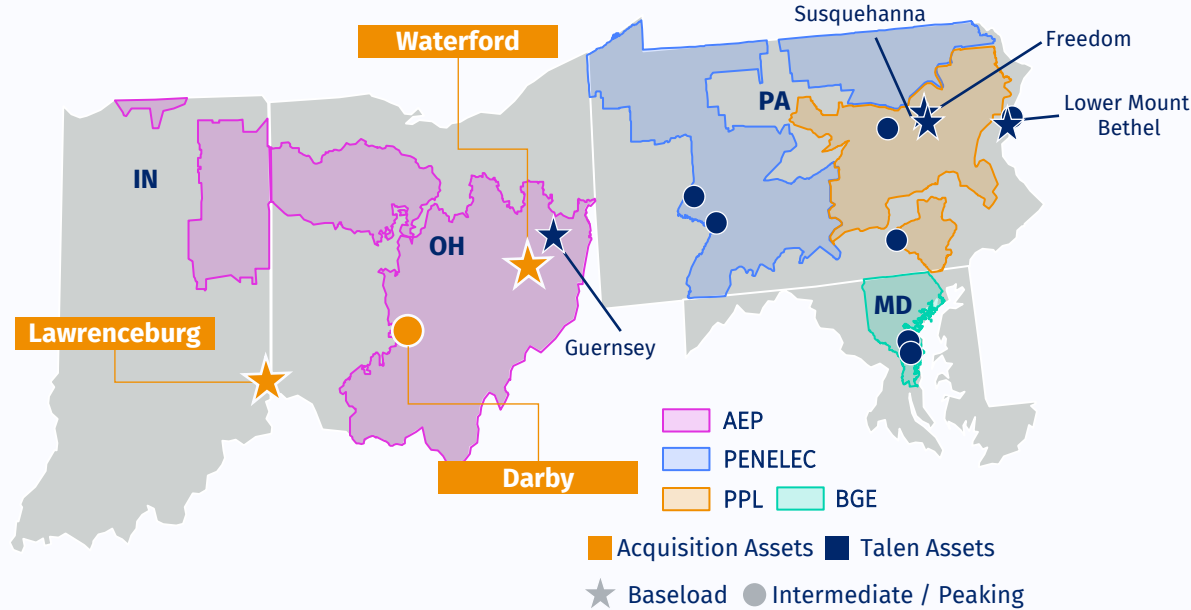
1. \$2 billion share repurchase plan approved by Board of Directors on September 8, 2025.

2. Capacity represents ICAP rating.

3. 2.4 million shares to be issued to ECP, which is expected to result in ECP owning ~5% of pro forma combined Talen equity estimated as of assumed closing date.

Acquisition of ~2.6 GW of PJM Gas Capacity in Ohio and Indiana

Acquiring Lawrenceburg, Waterford and Darby from Energy Capital Partners (“ECP”)

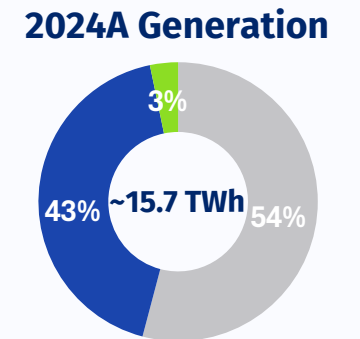
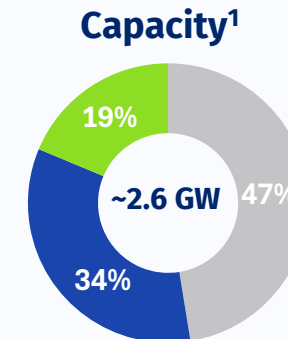


- Lawrenceburg and Waterford are highly efficient CCGTs that strengthen Talen’s generation profile
- Darby is a 480 MW¹ peaker that provides attractive commercial flexibility
- All three facilities have reliable access to low-cost natural gas from the Marcellus and Utica shale formations
- Increases presence in Ohio, a top-tier data center market

Key Metrics – Proposed Acquisition Assets

Plant Name	State	Power Market	Region	Plant Type	Capacity (MW) ¹	Configuration	Turbine Tech	COD	Heat Rate (Btu / kWh)	2024A Capacity Factor	2024A Generation (GWh)
Lawrenceburg	IN	PJM	AEP	CCGT	1,218	2 x 2 x 1	GE PG7241FA	2004	7,109	86.7%	8,503
Waterford	OH	PJM	AEP	CCGT	869	3 x 1	GE PG7241FA	2003	7,018	87.4%	6,702
Darby	OH	PJM	AEP	GT	480	6 (GT)	GE 7EA	2001	12,492	12.8%	510
Total / Wtd Avg²					2,567			2003	7,245	73.1%	15,715

■ Lawrenceburg ■ Waterford ■ Darby

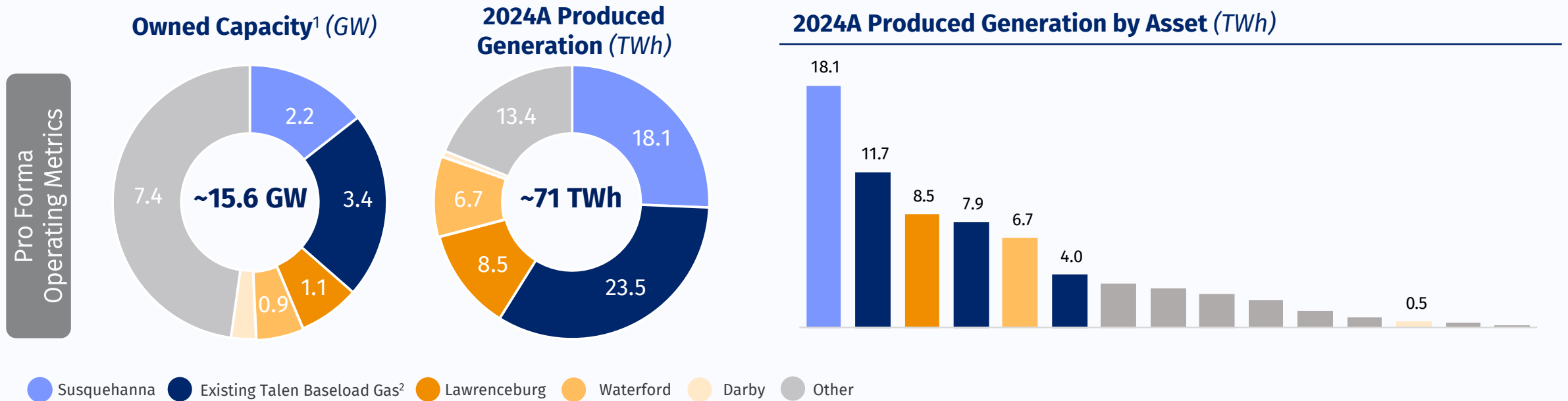


Source: Company Materials, SNL.

- Capacity represents ICAP rating.
- COD and capacity factor represent a weighted average based on capacity. Heat rate represents a unit weighted average by generation.

Modern Generation Fleet of Scale

Talen's pro forma annual generation is expected to approximately double after its recent acquisitions



✓ ~7.7 GW¹ of baseload capacity³ strengthens cash flow stability through increased dispatchability and reliability

✓ ~71 TWh (>80% baseload) enhances Talen's ability to capitalize on sector trends by pursuing contracting opportunities

Source: Company provided materials. Generation and capacity stats are shown for 2024.

1. Generation capacity is presented as summer rating (where applicable) and may be subject to revision based on factors, among others, such as operating experience and physical conditions.

2. Includes Freedom, Guernsey and Lower Mount Bethel.

3. Includes Susquehanna, Freedom, Guernsey, Lower Mount Bethel, Lawrenceburg and Waterford.

Key Transaction Terms

Purchase Price / Consideration

- Purchase price of \$3.45 billion
 - 6.6x EV / 2027E Adj EBITDA multiple and blended \$/kW of \$1,344¹
- Consideration to ECP consists of ~\$2.55 billion in cash and ~\$900 million of Talen equity
 - 2.4 million shares to be issued to ECP (~5% of expected pro forma equity)
 - Cash consideration expected to be funded with newly issued Talen debt
- Generates more than \$1 billion in nominal tax shield benefits² expected for future use
- Existing Lawrenceburg energy and capacity hedges to Indiana Michigan Utility remain in place³

ECP Commitment

- ECP's election to receive shares for ~\$900mm of its equity consideration reflects Talen's ongoing shareholder value proposition
- Ownership commitment from ECP with a 6-month, phased lock-up period on Talen shares

Financial Highlights

- Immediately >15% accretive to Adj FCF/share
- Maintains balance sheet strength with the ability to achieve <3.5x net leverage target by YE 2026
- Expect credit ratings to be affirmed by Moody's, S&P and Fitch at Ba3/BB-/BB-, respectively

Timing & Approvals

- Transaction close expected to occur early in the second half of 2026
- Required regulatory approvals include HSR, FERC and IURC⁴

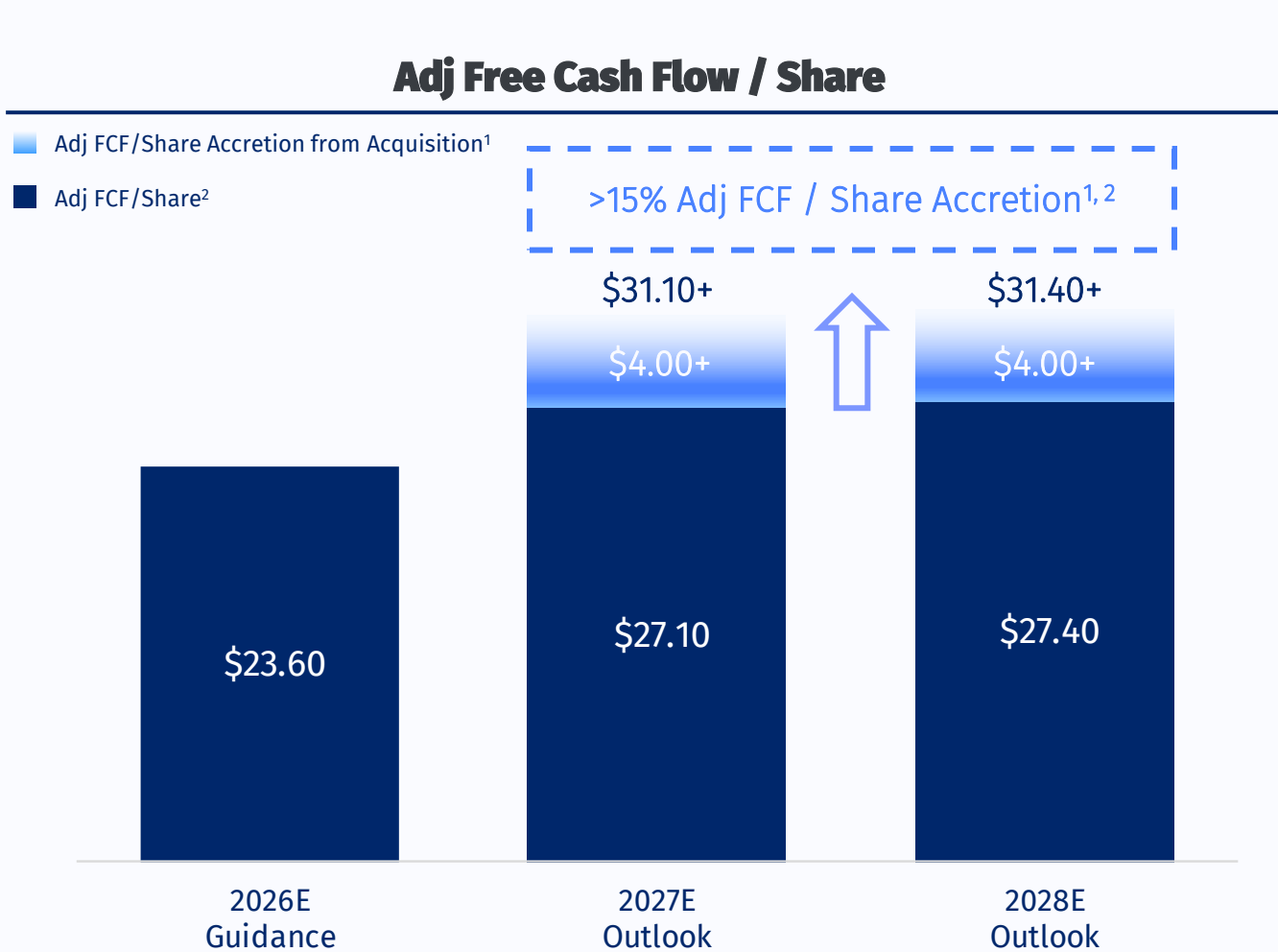
1. \$ / kW metric based on ICAP rating.

2. Includes NOLs and step-up basis with bonus depreciation.

3. We are assuming existing energy & capacity hedges including bilateral sale of 837MWs of Lawrenceburg UCAP capacity to Indiana Michigan Utility (IMU) for June 2028 thru May 2034

4. Lawrenceburg is located in Indiana and its transfer at closing is subject to approval by the Indiana Utility Regulatory Commission.

Transaction Enhances Projected Adj FCF / Share



Potential Upside to 2028	Adj FCF/Share Growth vs '28
\$2 Billion Share Repurchases ³	~10%
AWS PPA Accelerated by 480 MWs	~10%
Accretive M&A	~10 – 20% ✓
New 1 GW Data Center PPA	~10 – 15%
Total Potential Upside⁴	40%+

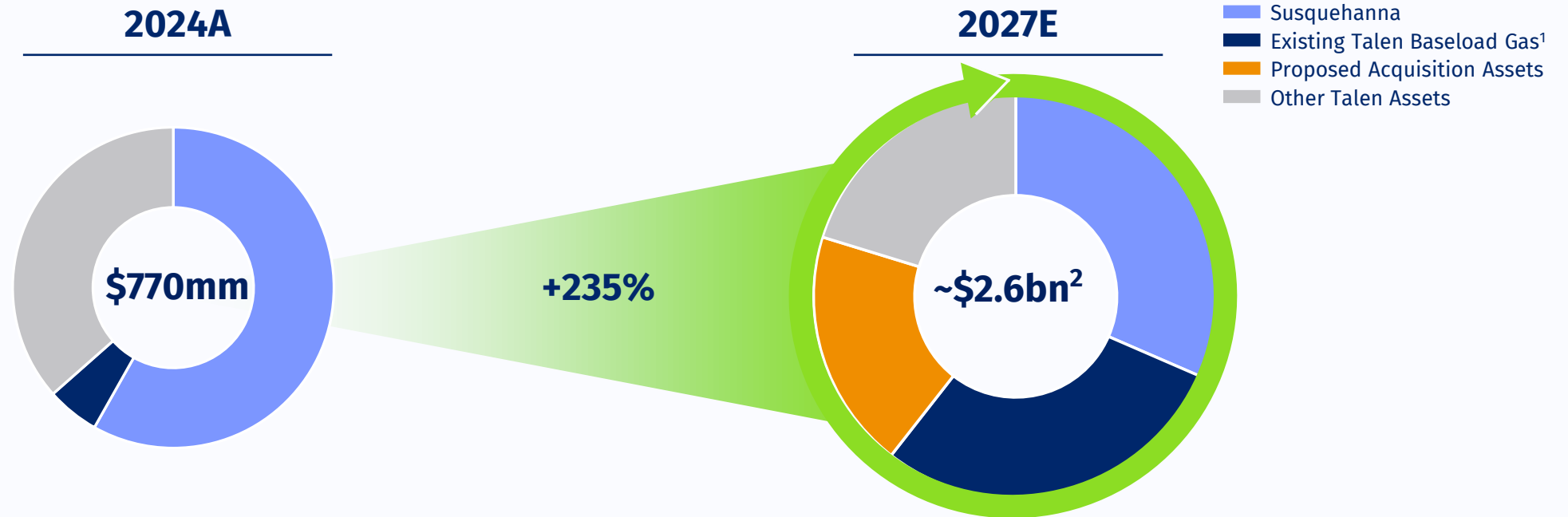
Note: Per share amounts rounded to nearest \$0.10.

- Share accretion includes: (i) first full year projected pro forma impact of the Acquisitions beginning January 1, 2027, utilizing Talen's September 9, 2025 Investor Update commodity prices of 07/31/25, (ii) expected effects from the One Big Beautiful Act of 2025 and (iii) expected effects of the 2.4 million Talen shares issued to ECP, Talen's approved SRP, and net shares issued to management pursuant to LTIP.
- 2026E Guidance and 2027E / 2028E Outlooks represent the midpoints from Talen's September 9, 2025 Investor Update. The effect of the Freedom and Guernsey acquisitions illustratively begins on January 1, 2026.

- Approved by Board of Directors on September 8, 2025.
- Potential upsides are not necessarily additive and will vary depending upon order of execution, capitalization of opportunities, and ability to monetize tax benefits as well as other factors.

Earnings Transformation

Strategic initiatives and margin expansion driving significant Adjusted EBITDA and cash flow growth and diversification



✓ Cash flows are significantly more diverse with baseload nuclear and natural gas³ now expected to account for >75% of 2027E Adjusted EBITDA

✓ ~\$1.6 billion of Adjusted Free Cash Flow expected in 2027, providing attractive strategic & financial flexibility

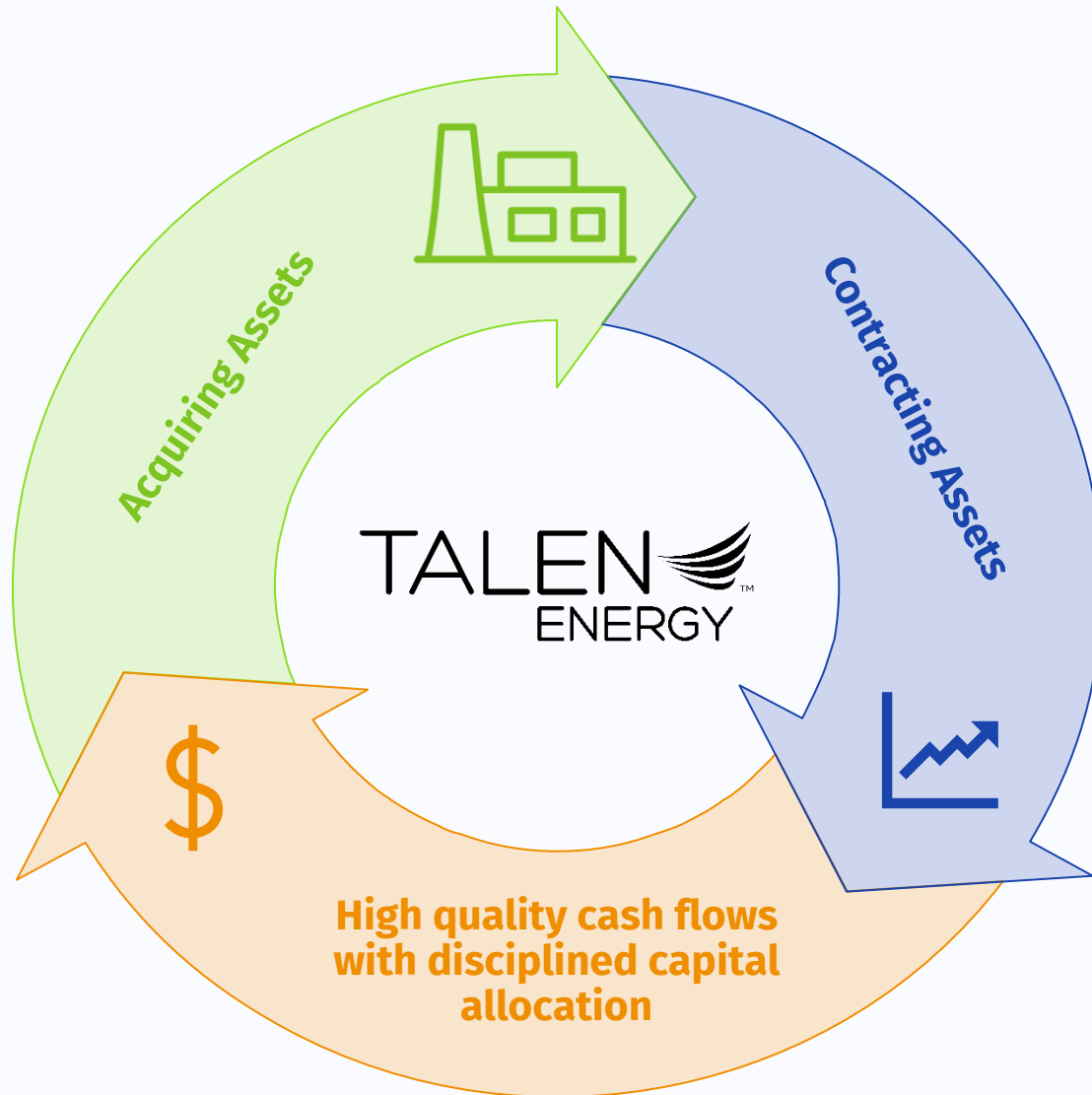
Source: Company provided materials.

1. 2027E Includes Freedom, Guernsey and Lower Mount Bethel. 2024A excludes Freedom and Guernsey.

2. Based on the midpoint of 2027E Adjusted EBITDA Outlook for Talen of ~\$2.04bn from Talen's September 9, 2025 Investor Update and expected 2027E Adjusted EBITDA inclusive of the: (i) first full year projected pro forma impact of the acquisition beginning January 1, 2027, and (ii) the effect of the Freedom and Guernsey acquisitions illustratively beginning on January 1, 2026.

3. Includes Susquehanna, Freedom, Guernsey, Lower Mount Bethel, Lawrenceburg, and Waterford.

Executing the Talen Flywheel Strategy



- ✓ Multiple transactions delivering strong and immediate Adjusted FCF/Share accretion
- ✓ Reshaping fleet by adding baseload MWs that are the equivalent to two more nuclear plants
- ✓ Diversified portfolio across Pennsylvania, Ohio and Indiana within PJM
- ✓ Locked-in ~2 GW of long-term contracts
- ✓ Maintaining ability to achieve net leverage target of <3.5x by YE 2026

Appendix

Pro Forma Generation Portfolio Summary

Asset	State	Primary Fuel Type(s)	Plant Type	Ownership	Owned Capacity (MW) ¹	Commercial Operations Date	Region
Proposed Acquisition							
Lawrenceburg	IN	Natural Gas	Baseload	100%	1,120	2004	PJM-AEP (RTO)
Waterford	OH	Natural Gas	Baseload	100%	875	2003	PJM-AEP (RTO)
Darby	OH	Natural Gas / Oil	Peaker	100%	456	2001	PJM-AEP (RTO)
Susquehanna Nuclear Facility							
Susquehanna ²	PA	Nuclear	Baseload	90%	2,245	1983 - 1985	PJM-PPL (MAAC)
PJM Gas Assets							
Freedom	PA	Natural Gas	Baseload	100%	1,049	2018	PJM-PPL (MAAC)
Guernsey	OH	Natural Gas	Baseload	100%	1,771	2023	PJM-AEP (RTO)
Lower Mount Bethel	PA	Natural Gas	Baseload	100%	607	2004	PJM-PPL (MAAC)
Brunner Island ^{3,4}	PA	Natural Gas / Coal	Intermediate	100%	1,419	1961 - 1969	PJM-PPL (MAAC)
Martins Creek	PA	Natural Gas	Peaker	100%	1,710	1975 - 1977	PJM-PPL (MAAC)
Montour	PA	Natural Gas	Peaker	100%	1,505	1972 - 1973	PJM-PPL (MAAC)
Reliability Assets							
Brandon Shores ⁵	MD	Coal	Peaker	100%	1,273	1984 - 1991	PJM-BGE (SWMAAC)
H.A. Wagner ⁵	MD	Oil	Peaker	100%	702	1956 - 1972	PJM-BGE (SWMAAC)
Colstrip ²	MT	Coal	Baseload	15%	222	1984 - 1986	WECC
Other							
Conemaugh ^{2,4}	PA	Coal	Intermediate	22%	392	1970 - 1971	PJM-PENELEC (MAAC)
Keystone ^{2,4}	PA	Coal	Intermediate	12%	213	1967 - 1968	PJM-PENELEC (MAAC)
Total					15,559		

Source: Company materials.

1. Generation capacity is presented as summer rating (where applicable) and may be subject to revision based on factors, among others, such as operating experience and physical conditions.
2. See Note 10 to the FY 2024 Financial Statements for additional information on jointly owned facilities.
3. Coal-fired electric generation is restricted during the EPA Ozone Season, which is May 1 to September 30 of each year.
4. Coal-fired electric generation is required to cease at Brunner Island by December 2028 and Keystone and Conemaugh by 2034.
5. See Note 7 to the Q3 2025 Financial Statements for additional information on the Brandon Shores and H.A. Wagner RMR arrangements.

Pro Forma Talen Portfolio

Acquisition enhances Talen's fleet across all key metrics

TALLEN ENERGY¹



Lawrenceburg,
Waterford & Darby

			Pro Forma	Impact
Capacity by Tech ² (GW)	<p>~13.1 GW</p>	<p>~2.5 GW</p>	<p>~15.6 GW</p>	+19%
Generation by Tech ⁴ (TWh)	<p>~55.0 TWh</p>	<p>~15.7 TWh</p>	<p>~70.7 TWh</p>	+29%
Natural Gas Fleet Heat Rate ⁵ (Btu / kWh)	~7,780 Btu / kWh	~7,240 Btu / kWh	~7,600 Btu / kWh	Improvement of 180
2024A Capacity Factor (%)	~48%	~73%	~52%	+4%
COD ⁶	1987	2003	1990	+3 years

Source: Publicly available information, S&P Capital IQ.

1. All stats pro forma for Freedom and Guernsey.
2. Generation capacity is presented as summer rating (where applicable) and may be subject to revision based on factors, among others, such as operating experience and physical conditions.
3. Other includes intermediate, peaking and coal baseload plants.
4. 2024A annual generation.
5. Calculated based on natural gas plants only. Weighted average based on generation.
6. Weighted average based on capacity.