TALEN ENERGY CORPORATION

36,825,683 SHARES OF COMMON STOCK

This prospectus supplement is being filed to update and supplement the information contained in the prospectus dated July 9, 2024, as supplemented by Prospectus Supplement No. 1, dated August 13, 2024, Prospectus Supplement No. 2, dated November 14, 2024, and Prospectus Supplement No. 3, dated December 13, 2024 (as so supplemented, the "Prospectus"), with the information contained in our Current Report on Form 8-K, filed with the Securities and Exchange Commission (the "SEC") on December 20, 2024 (the "Current Report"). Accordingly, we have attached the Current Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate to the resale from time to time of up to 36,825,683 shares of our common stock, par value \$0.001 per share (the "Common Stock"), by the selling stockholders named in the Prospectus or their permitted transferees.

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any other amendments or supplements thereto. This prospectus supplement should be read in conjunction with the Prospectus, and if there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement. The information in this prospectus supplement modifies and supersedes, in part, the information in the Prospectus. Any information in the Prospectus that is modified or superseded shall not be deemed to constitute a part of the Prospectus except as modified or superseded by this prospectus supplement.

You should not assume that the information provided in this prospectus supplement or the Prospectus is accurate as of any date other than their respective dates. Neither the delivery of this prospectus supplement and Prospectus, nor any sale made hereunder, shall under any circumstances create any implication that there has been no change in our affairs since the date of this prospectus supplement or that the information contained in this prospectus supplement or the Prospectus is correct as of any time after the date of that information.

The Common Stock is listed on The Nasdaq Global Select Market ("Nasdaq") under the symbol "TLN". On December 19, 2024, the last sale price of the Common Stock as reported on Nasdaq was \$195.90 per share.

Investing in our securities involves certain risks, including those that are described in the section titled "Risk Factors" beginning on page 19 of the Prospectus.

Neither the SEC nor any state securities commission has approved or disapproved of the securities to be issued under the Prospectus or determined if the Prospectus or this prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 20, 2024.

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	FORM 8-K	
_	CURRENT REPORT	
Pursuant to	Section 13 or 15(d) of The Securities Exc	hange Act of 1934
Date of R	eport (date of earliest event reported): Dece	ember 20, 2024
	Talen Energy Corporat Exact name of registrant as specified in its o	
—— Delaware	001-37388	 47-1197305
(State or other jurisdiction of incorporation or organization)	(Commission File Number)	(IRS Employer Identification No.)
	2929 Allen Pkwy, Suite 2200 Houston, TX 77019 (Address of principal executive offices) (Zip	Code)
(F	(888) 211-6011 Registrant's telephone number, including are	a code)
(Former name, f	Not applicable former address and former fiscal year, if charter	nged since last report)
Check the appropriate box below if the Form 8-K filiprovisions:	ing is intended to simultaneously satisfy the	filing obligation of the registrant under any of the following
Written communications pursuant to Rule 425 Soliciting material pursuant to Rule 14a-12 und Pre-commencement communications pursuan Pre-commencement communications pursuan	der the Exchange Act (17 CFR 240.14a-12) t to Rule 14d-2(b) under the Exchange Act (` "
Secur	ities registered pursuant to Section 12(b)) of the Act:
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.001 per share	e TLN	The Nasdaq Global Select Market
ndicate by check mark whether the registrant is an Rule 12b-2 of the Securities Exchange Act of 1934 Emerging growth company □	emerging growth company as defined in Ru (17 CFR §240.12b-2).	ule 405 of the Securities Act of 1933 (17 CFR§230.405) or
f an emerging growth company, indicate by check r or revised financial accounting standards provided p		the extended transition period for complying with any new $\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$

Item 1.01. Entry into a Material Definitive Agreement

On December 20, 2024 (the "Effective Date"), Talen Energy Supply, LLC (the "Borrower"), a direct subsidiary of Talen Energy Corporation (the "Company"), amended its credit agreement (as amended, the "Amended Credit Agreement"). Capitalized terms used but not defined herein have the meaning provided in the Amended Credit Agreement, which is filed as Exhibit 10.1 to this Current Report on Form 8-K (this "Report"). The Amended Credit Agreement (i) provides for a \$900,000,000 senior secured stand-alone letter of credit facility (the "Stand-Alone Letter of Credit Facility"), (ii) reprices and extends the maturity of the Revolving Credit Facility, (iii) reprices the existing Initial Term B Loans, and (iv) implements certain other amendments as set forth below.

Concurrently with entry into the Amended Credit Agreement, the Borrower also (i) repaid the Term C Loans and permanently terminated the associated letter of credit commitments and (ii) permanently terminated the \$75 million senior secured bilateral letter of credit facility under that certain Letter of Credit Facility Agreement, dated as of May 17, 2023, by and among the Borrower, Barclays Bank PLC, as administrative agent and LC issuer, and Citibank, N.A., as collateral agent (the "Barclays Facility").

The Revolving Credit Facility maturity date has been extended from May 17, 2028 to December 20, 2029. The Revolving Credit Facility will bear interest at a rate per annum equal to either (1) a fluctuating rate equal to the highest of (A) the Federal Funds Effective Rate on such day, plus 0.50%, (B) The Wall Street Journal "U.S. Prime Rate," and (C) the one-month Adjusted Term SOFR Rate, plus 1%, plus, in each case, the Applicable ABR Margin; or (2) the Adjusted Term SOFR Rate for the interest period, plus the Applicable Term SOFR Margin, provided, that both the Applicable ABR Margin and the Applicable Term SOFR Margin applicable to the Revolving Credit Facility will be subject to two 25 basis point reductions if the Consolidated First Lien Net Leverage Ratio is no greater than 2.00:1.00 and 1.50:1.00, respectively.

Under the Revolving Credit Facility, the Company will be required to pay (i) a per annum fee in respect of each issued Revolving Letter of Credit equal to the product of the Applicable Term SOFR Margin and the average daily amount of such Revolving Letters of Credit, (ii) a commitment fee of 0.375% per annum on the undrawn portion of the Revolving Commitments (subject to one stepdown to 0.25% if the Consolidated First Lien Net Leverage Ratio is no greater than 2.00:1.00), and (iii) a fronting fee of 0.125% on the aggregate amount of outstanding Revolving Letters of Credit.

The Stand-Alone Letter of Credit Facility is available for the issuance of U.S. dollar denominated standby and trade letters of credit (letters of credit under such facility, "Stand-Alone Letters of Credit") and will mature on December 20, 2026. Under the Stand-Alone Letter of Credit Facility, the Company will be required to pay (i) a per annum fee in respect of each issued Stand-Alone Letter of Credit equal to the product of the Applicable Term SOFR Margin and the average daily amount of such Stand-Alone Letters of Credit, (ii) a commitment fee of 0.375% per annum on unused Stand-Alone Letter of Credit Facility commitments (subject to one stepdown to 0.25% if the Consolidated First Lien Net Leverage Ratio is no greater than 2.00:1.00), and (iii) and a fronting fee of 0.125% on the aggregate amount of outstanding Stand-Alone Letters of Credit.

The Initial Term B Loans will bear interest at a rate per annum equal to either (1) a fluctuating rate equal to the highest of (A) the Federal Funds Effective Rate on such day, plus 0.50%, (B) The Wall Street Journal "U.S. Prime Rate," and (C) the one-month Adjusted Term SOFR Rate, plus 1%, plus, in each case, the Applicable ABR Margin; or (2) the Adjusted Term SOFR Rate for the interest period, plus the Applicable Term SOFR Margin, provided, that both the Applicable ABR Margin and the Applicable Term SOFR Margin applicable to the Initial Term B Loans will be subject to two 25 basis point reductions if the Consolidated First Lien Net Leverage Ratio is no greater than 1.65:1.00 and 1.40:1.00, respectively.

The Amended Credit Agreement contains substantially the same representations and warranties, guarantees, affirmative covenants, negative covenants, and customary events of default as in the Company's credit agreement as in effect prior to the amendment described above, except for the following:

- capacity to make certain restricted payments was increased, including increasing each of the unlimited ratio, applicable amount, annual IPO, and general baskets;
- capacity to make certain investments was increased, including increasing each of the unlimited ratio, applicable amount, and general baskets;
- the provisions governing the asset sale mandatory prepayment "sweep" were modified to include two consolidated first lien net leverage based step downs reducing the level of such "sweep" and the existing reinvestment right relating to such proceeds was also amended;

- the threshold for the "springing" financial covenant governing the Revolving Credit Facility and the Stand-Alone Letter of Credit Facility was increased to 50% of the Total Revolving Commitment and revised to exclude all outstanding Revolving Letters of Credit;
- · cross defaults were limited to cross acceleration; and
- · certain other modifications made in entering into the Amended Credit Agreement.

This description of the Amended Credit Agreement is a summary only, does not purport to be complete, and is qualified in its entirety by reference to the full text of the Amended Credit Agreement, which is filed as Exhibit 10.1 to this Report.

Item 1.02. Termination of a Material Definitive Agreement.

The disclosures under Item 1.01 of this Report regarding the Barclays Facility are incorporated herein by reference.

Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The disclosures under Item 1.01 of this Report regarding the Amended Credit Agreement are incorporated herein by reference.

Item 7.01. Regulation FD Disclosure.

On December 20, 2024, the Company issued a press release announcing the closing of the Amended Credit Agreement, as further described in Item 1.01 of this Report. A copy of the press release is furnished as Exhibit 99.1 to this Report and is incorporated herein by reference.

The information under this Item 7.01 and in Exhibit 99.1 to this Report is being furnished and shall not be deemed "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. The information under this Item 7.01 and in Exhibit 99.1 to this Report shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits:

Exhibit No.	Description.	
10.1	Amendment No. 4 to the Credit Agreement, dated as of December 20, 2024, among Talen Energy Supply, LLC, as borrower,	
	the subsidiary guarantors party thereto, the lenders party thereto and Citibank N.A., as administrative agent and collateral	
	<u>agent.</u>	
99.1	Press Release dated December 20, 2024.	
104	Cover Page Interactive Data File (cover page XBRL tags embedded within the Inline XBRL document).	

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

TALEN ENERGY CORPORATION

Date: December 20, 2024 By: /s/ Terry L. Nutt

Name: Terry L. Nutt

Title: Chief Financial Officer