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 Exchange Act of 1934

Date of Report (Date of earliest event reported): **September 17, 2026**

STARDUST POWER INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-39875**	**99-3863616**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

15 E. Putnam Ave, Suite 378, Greenwich, CT	**06830**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(800) 742-3095**

Not Applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities 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 $0.0001 per share	SDST	The Nasdaq Capital Market
Redeemable warrants, with 10 warrants exercisable for one share of Common Stock at an exercise price of $115.00	SDSTW	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 8.01 Other Events.

On September 17, 2026, Stardust Power Inc. (the "Company") filed the Amendment No.1 (the "Amendment No. 1") to the Prospectus Supplement (as defined below) to update the maximum number of shares of the Company's common stock (the "Placement Shares") issuable pursuant to the At Market Issuance Sales Agreement between the Company and B. Riley Securities, Inc., dated May 8, 2026 (the "Sales Agreement"), to up to an additional aggregate of $8,990,537 of Placement Shares.

The issuance and sale of the Placement Shares by the Company under the Sales Agreement will be made pursuant to the Company's registration statement on Form S-3 (File No. 333-294938) filed with the Securities and Exchange Commission on April 9, 2026, and declared effective on April 16, 2026, as supplemented and amended by the prospectus supplement, dated as of May 8, 2026.

A copy of the legal opinion of Thompson Hine LLP relating to the Placement Shares is filed as Exhibit 5.1 hereto.

This Current Report on Form 8-K shall not constitute an offer to sell or a solicitation of an offer to buy any shares of common stock in any state or jurisdiction in which such an offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

Item 9.01. Financial Statement and Exhibits.

(d) Exhibits.

Exhibit Number	Description
5.1	Thompson Hine LLP.
23.1	Thompson Hine LLP (included in Exhibit 5.1).
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

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.

Date: September 17, 2026	STARDUST POWER INC.
	/s/ Roshan Pujari
	Roshan Pujari
	Chief Executive Officer

Exhibit 5.1

THOMPSON HINE

ATLANTA | CHICAGO | CINCINNATI | CLEVELAND
COLUMBUS | DAYTON | LOS ANGELES | MINNEAPOLIS
NEW YORK | SILICON VALLEY | WASHINGTON, D.C.

September 17, 2026

Stardust Power Inc.
15 E. Putnam Ave, Suite 378
Greenwich, CT 06830

Re: Stardust Power Inc. Common Stock

Ladies and Gentlemen:

We have acted as counsel to Stardust Power Inc., a Delaware corporation (the "***Company***"), with respect to certain matters in connection with the offering by the Company of $8,990,537 of shares of the Company's common stock, par value $0.0001 per share (the "***Shares***"), pursuant to the Registration Statement on Form S-3 (File No. 333-294938) (as amended, the "***Registration Statement***"), originally filed with the Securities and Exchange Commission (the "***Commission***") under the Securities Act of 1933(as amended, the "***Act***") on April 6, 2026, and declared effective by the Commission on April 16, 2026, which includes the base prospectus and the prospectus supplement dated May 8, 2026, and the Amendment to the prospectus supplement dated September 17, 2026, filed with the Commission pursuant to Rule 424(b) promulgated under the Act (together with the base prospectus, the "***Prospectus***"). The Shares are to be sold by the Company in accordance with the At Market Issuance Sales Agreement dated May 8, 2026, by and between the Company and B. Riley Securities, Inc. (the "***Sales Agreement***"), as described in the Prospectus.

In rendering this opinion, we have examined and are familiar with the following:

a. The Certificate of Incorporation, as amended and Bylaws of the Company, through the date hereof (the "***Certificate of Incorporation"*** and "***Bylaws***", respectively).

b. The Registration Statement.

c. The Prospectus.

d. Such other records, instruments, documents, and certificates as we have deemed advisable in order to render such opinion.

In such examination, we have assumed:

a. The genuineness of all signatures.

b. The legal capacity of all natural persons.

c. The authenticity of all documents submitted to us as originals.

d. The conformity to original documents of all documents submitted to us as copies.

Based upon and subject to the foregoing and subject to the assumptions, limitations and qualifications stated herein, we are of the opinion that the Shares to be issued and sold by the Company have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Sales Agreement, the Shares will be validly issued, fully paid and non-assessable.

Our opinions expressed above are limited to the General Corporation Laws of the State of Delaware and laws of the State of New York, in each case as currently in effect (collectively, "***Applicable Law***"), and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

We have relied as to certain matters on information obtained from public officials, officers of the Company, and other sources believed by us to be responsible.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion as an exhibit to a Current Report on Form 8-K in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Thompson Hine LLP

Thompson Hine LLP