

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

**X-Energy, Inc.**  
(Exact Name of Registrant as Specified in its Charter)

Delaware  
(State or other jurisdiction  
of incorporation or organization)

4911  
(Primary Standard Industrial  
Classification Code Number)

41-3934505  
(I.R.S. Employer  
Identification No.)

530 Gaither Road, Suite 700  
Rockville, Maryland 20850  
(301) 358-5600

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

J. Clay Sell  
Chief Executive Officer  
530 Gaither Road, Suite 700  
Rockville, Maryland 20850  
(301) 358-5600

(Name, address, including zip code, and telephone number, including area code, of agent for service)

*Copies to:*

Paul F. Sheridan Jr.  
Ian Schuman  
John Slater  
Latham & Watkins LLP  
555 Eleventh Street, NW Suite  
1000 Washington, D.C. 20004  
(713) 546-7967

J. Clay Sell  
X-Energy, Inc.  
530 Gaither Road, Suite 700  
Rockville, Maryland 20850  
(301) 358-5600

P. Michelle Gasaway  
Michael Hong  
Philip Dear  
Skadden, Arps, Slate, Meagher & Flom LLP  
845 Texas Avenue, Suite 2300  
Houston, TX 77002  
(713) 655-5190

**Approximate date of commencement of proposed sale to the public:**  
As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  (File No. 333-294508)

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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 7(a)(2)(B) of the Securities Act.

**The Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended.**

## EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This Registration Statement on Form S-1 (this "Registration Statement") is being filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, for the sole purpose of increasing the aggregate number of Class A common stock, par value \$0.0001 per share, of X-Energy, Inc. (the "Registrant") by 1,607,143 shares, 209,627 of which are subject to purchase upon exercise of the underwriters' option to purchase additional shares of the Registrant's Class A common stock. The additional securities that are being registered for sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Filing Fee Table (Exhibit 107) filed as an exhibit to the Registration Statement on Form S-1, as amended (File No. 333-294508) (the "Prior Registration Statement"). The information set forth in the Prior Registration Statement and all exhibits thereto are hereby incorporated by reference in this filing.

The required opinion and consents are listed on an Exhibit Index attached hereto and filed herewith.

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## Exhibit Index

Exhibit Number	Description of Exhibit
<a href="#">5.1</a>	<a href="#">Opinion of Latham &amp; Watkins LLP (incorporated by reference to Exhibit 5.1 filed with the Prior Registration Statement on April 20, 2026 and incorporated by reference herein).</a>
<a href="#">23.1</a>	<a href="#">Consent of Ernst &amp; Young LLP, independent registered public accounting firm to X-Energy Reactor Company, LLC.</a>
<a href="#">23.2</a>	<a href="#">Consent of Ernst &amp; Young LLP, independent registered public accounting firm to X-Energy, Inc.</a>
<a href="#">23.3</a>	<a href="#">Consent of Latham &amp; Watkins LLP (included in Exhibit 5.1).</a>
<a href="#">24.1</a>	<a href="#">Power of Attorney (included on the signature page of the Prior Registration Statement filed on March 20, 2026, as amended, and incorporated by reference herein).</a>
<a href="#">107</a>	<a href="#">Calculation of Filing Fee Table.</a>

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**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Rockville, State of Maryland, on this 23rd day of April, 2026.

X-Energy, Inc.

By: /s/ J. Clay Sell  
Name: J. Clay Sell  
Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities indicated below on this 23rd day of April, 2026.

<u>Name</u>	<u>Title</u>
<u>/s/ J. Clay Sell</u> J. Clay Sell	Chief Executive Officer (Principal Executive Officer)
<u>/s/ Daniel Gross</u> Daniel Gross	Chief Financial Officer (Principal Financial Officer)
<u>/s/ Laura Garcia</u> Laura Garcia	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
<u>*</u> Kamal Ghaffarian	Director
<u>*</u> Edward Sonnenschein	Director
<u>*</u> Michael J. Wallace	Director
<u>*</u> Kathleen W. Hyle	Director
<u>*</u> Christopher F. Ginther	Director
<u>*</u> David B. Kaplan	Director
<u>*</u> Allyson Satin	Director
<u>*</u> Gregory Goff	Director

\*By: /s/ Steven Miller  
Name: Steven Miller  
Title: Attorney-in-fact

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption “Experts” and to the incorporation by reference of our report dated March 20, 2026, with respect to the consolidated financial statements of X-Energy Reactor Company, LLC included in Amendment No. 4 to the Registration Statement (Form S-1 No. 333-294508) and related Prospectus of X-Energy, Inc. for the registration of X-Energy, Inc.’s common stock.

/s/ Ernst & Young LLP

Tysons, Virginia

April 23, 2026

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**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption "Experts" and to the incorporation by reference of our report dated March 20, 2026, with respect to the financial statements of X-Energy, Inc. included in Amendment No. 4 to the Registration Statement (Form S-1 No. 333-294508) and related Prospectus of X-Energy, Inc. for the registration of its common stock.

/s/ Ernst & Young LLP

Tysons, Virginia

April 23, 2026

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# Calculation of Filing Fee Tables

## S-1

### X-Energy, Inc.

Table 1: Newly Registered and Carry Forward Securities

Not Applicable

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
<b>Newly Registered Securities</b>												
Fees to be Paid	1 Equity	Class A common stock	457(a)	1,607,143	\$ 23.00	36,964,289.00	\$ 0.0001381	\$ 5,104.77				
Fees Previously Paid												
<b>Carry Forward Securities</b>												
Carry Forward Securities												
Total Offering Amounts:						\$		\$ 5,104.77				
						36,964,289.00						
Total Fees Previously Paid:								\$ 0.00				
Total Fee Offsets:								\$ 0.00				
Net Fee Due:								\$ 5,104.77				

#### Offering Note

1

Represents only the additional number of shares of Class A common stock being registered and includes additional shares of Class A common stock that the underwriters have the option to purchase. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1, as amended (File No. 333-294508).

Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended (the "Securities Act"). The Registrant previously paid an aggregate filing fee of \$129,320.78 for the Registration Statement on Form S-1, as amended (File No. 333-294508). In accordance with Rule 462(b) under the Securities Act of 1933, as amended, an additional amount of securities having a proposed maximum offering price per unit of \$23.00 are hereby registered, which includes the additional shares that the underwriters have the option to purchase.

Table 2: Fee Offset Claims and Sources

Not Applicable

	Registrant or Filer Name	Form or Filing Type	File Number	Initial Filing Date	Filing Date	Fee Offset Claimed	Security Type Associated with Fee Offset Claimed	Security Title Associated with Fee Offset Claimed	Unsold Securities Associated with Fee Offset Claimed	Unsold Aggregate Offering Amount Associated with Fee Offset Claimed	Fee Paid with Fee Offset Source
<b>Rules 457(b) and 0-11(a)(2)</b>											
Fee Offset Claims											
Fee Offset Sources											
<b>Rule 457(p)</b>											
Fee Offset Claims											
Fee Offset Sources											

Table 3: Combined Prospectuses

Not Applicable

Security Type	Security Class Title	Amount of Securities Previously Registered	Maximum Aggregate Offering Price of Securities Previously Registered	Form Type	File Number	Initial Effective Date