

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 (see General Instruction A.2. below):

- 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17

CFR §240.12b-2). 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 5.07 Submission of Matters to a Vote of Security Holders.

Advanced Energy Industries, Inc. (the "Company") held its 2018 Annual Meeting of Stockholders on Thursday, May 3, 2018 to vote on three proposals. The following matters as set forth in the Proxy Statement dated March 15, 2018, which was filed with the Securities and Exchange Commission pursuant to Regulation 14A under the Securities Exchange Act of 1934, were voted upon with the results indicated below.

1. Election of seven (7) directors.

The following seven nominees were elected to serve as directors of the Company, with the following votes tabulated:

| | For | Withhold | Broker Non-Vote |
|-------------------|------------|-----------|-----------------|
| Frederick A. Ball | 29,793,680 | 1,445,475 | 3,542,741 |
| Grant H. Beard | 28,387,687 | 2,851,468 | 3,542,741 |
| Ronald C. Foster | 30,441,980 | 797,175 | 3,542,741 |
| Edward C. Grady | 29,798,650 | 1,440,505 | 3,542,741 |
| Thomas M. Rohrs | 23,298,250 | 7,940,905 | 3,542,741 |
| John A. Roush | 30,441,806 | 797,349 | 3,542,741 |
| Yuval Wasserman | 30,687,723 | 551,432 | 3,542,741 |

Each director has been elected to serve until the 2019 Annual Meeting of Stockholders, or until his successor has been elected and qualified or until such director's earlier resignation or removal.

2. Ratification of the appointment of Grant Thornton LLP as Advanced Energy's independent registered public accounting firm for 2018.

The appointment of Grant Thornton LLP as the Company's independent registered public accounting firm for 2018 was ratified, with the following votes tabulated:

| For | Against | Abstain | Broker Non-Vote |
|------------|-----------|---------|-----------------|
| 33,392,243 | 1,360,217 | 29,436 | — |

3. Advisory approval on the Company's executive compensation of its named executive officers.

The advisory approval of the compensation of the Company's named executive officers as disclosed in the proxy statement was approved, with the following votes tabulated:

| For | Against | Abstain | Broker Non-Vote |
|------------|-----------|---------|-----------------|
| 29,656,256 | 1,544,193 | 38,706 | 3,542,741 |

Item 8.01 Other Events.

On May 3, 2018, the Board of Directors of the Company approved a \$50 million increase in its authorization to repurchase shares of Company common stock. As of the date of this report, and when combined with the remaining prior authorization of \$41.5 million, the Company has a total of \$91.5 million in share repurchase authorization. Share repurchases may be made from time-to-time in the public or private markets, through block trades, Rule 10b5-1 trading plans or other available means and may include the use of derivative contracts and structured and accelerated share repurchase agreements, all in accordance with applicable securities and other laws, including the Securities Exchange Act of 1934, as amended. There is no minimum number of shares required to be repurchased under the share repurchase program, and the share repurchase program may be suspended or discontinued at any time. The share repurchase program is scheduled to expire in December 2019.

This Current Report on Form 8-K contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including forward-looking statements regarding the share repurchase authorization and related programs. These statements are neither promises nor guarantees and involve risks and uncertainties that could cause actual results to differ materially from those stated or implied by the forward-looking statements, including, without limitation, risks relating to the Company's ability to implement and make appropriate, timely and beneficial decisions as to when, how and if to purchase shares under the repurchase authorization / program; and other risks described in the Company's filings with the SEC.

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.

ADVANCED
ENERGY
INDUSTRIES,
INC.

/s/ Thomas O.
McGimpsey
Date: May 4, 2018 Thomas O.
McGimpsey
Executive Vice
President,
General
Counsel and
Corporate
Secretary