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): April 23, 2014

ELECTRO-SENSORS, INC.

(Exact name of Registrant as Specified in its Charter)

Minnesota (State or other jurisdiction of incorporation) 000-09587 (Commission File Number) 41-0943459 (I.R.S. Employer Identification No.)

6111 Blue Circle Drive Minnetonka, Minnesota 55343-9108 (Address of Principal Executive Offices)

(952) 930-0100 (Registrant's telephone number, including area code)

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))

Item 5.07. Submission of Matters to a Vote of Security Holders.

The Company held its Annual Meeting of Shareholders on April 23, 2014 (the "2014 Annual Meeting"). Set forth below is a brief description of each matter voted upon at the meeting and the voting results with respect to each matter.

1. A proposal to set the number of directors at five.

For	<u>Against</u>	Abstentions	Broker Non-Votes
2,961,830	21,614	679	40,563

2. A proposal to elect five directors to serve until the next annual meeting of shareholders:

Director Nominee	Votes For	Votes Withheld	Broker Non-Votes
David L. Klenk	2,259,151	180,487	585,048
Jeffrey D. Peterson	2,259,151	180,487	585,048
Scott A. Gabbard	2,260,251	179,387	585,048
Joseph A. Marino	2,260,251	179,387	585,048
Michael C. Zipoy	2,260,248	179,390	585,048

3. A proposal to ratify the appointment of Boulay PLLP as independent auditors for the fiscal year ending December 31, 2014

For	<u>Against</u>	Abstentions	Broker Non-Votes
3,019,477	635	4,573	0

Pursuant to the foregoing votes, the number of directors was set at five; Messrs. Klenk, Peterson, Gabbard, Marino and Zipoy were elected to serve as directors until the next annual meeting of shareholders; and the appointment of Boulay PLLP as independent auditors for the fiscal year ending December 31, 2014 was ratified.

SIGNATURES

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

ELECTRO-SENSORS, INC.

Date: April 25, 2014

By: /s/ David L. Klenk

David L. Klenk Chief Executive Officer and Chief Financial Officer