FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| l | OMB APPRO              | DVAL      |  |  |  |  |
|---|------------------------|-----------|--|--|--|--|
|   | OMB Number:            | 3235-0287 |  |  |  |  |
| l | Estimated average burd | en        |  |  |  |  |
| l | hours per response:    | 0.5       |  |  |  |  |

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person* <u>Kilberg Bobbie G</u>  |   |  |  |       |   |  | 2. Issuer Name <b>and</b> Ticker or Trading Symbol  LUNA INNOVATIONS INC [ LUNA ] |        |  |               |   |   |  |              |   | tionship of Reporting F<br>all applicable)<br>Director<br>Officer (give title<br>below) |   | ,   | Solution (1997) Issuer                  |
|--|---|--|--|-------|---|--|---|--------|--|---------------|---|---|--|--------------|---|---|---|---|---|
| (Last) (First) (Middle)  C/O LUNA INNOVATIONS INCORPORATED   |   |  |  |       |   |  | 3. Date of Earliest Transaction (Month/Day/Year) 01/02/2009                       |        |  |               |   |   |  |              |   |   |   | Oth<br>belo   | er (specify<br>w)                       |
| 1 RIVERSIDE CIRCLE, SUITE 400  (Street)  |   |  |  |       |   | 4. If Amendment, Date of Original Filed (Month/Day/Year) |   |        |  |               |   |   |  |              | Individual or Joint/Group Filing (Check Applicable Line)     X Form filed by One Reporting Person |   |   |   |   |
| l ` ′  | ROANOKE VA 24016  |  |  |       |   |  |   |        |  |               |   |   |  |              | Form filed by More than One Reporting Person  |   |   |   |   |
| (City)   | (St   | ate) (2                                    | Zip)   |       |   |  |   |        |  |               |   |   |  |              |   |   |   |   |   |
| Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned   |   |  |  |       |   |  |   |        |  |               |   |   |  |              |   |   |   |   |   |
| 1. Title of Security (Instr. 3)  2. Transac Date (Month/Date)  |   |  |  |       |   | Execution Date   |   |        | 3.<br>Transa<br>Code (<br>8)                               |               | Securities Acquired (A) isposed Of (D) (Instr. 3, |   |  | 4 and So     |   | ount of<br>ities<br>icially<br>d Following  | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)   | of Indirect<br>Beneficial<br>Ownership                            |   |
|  |   |  |  |       |   | Code   | v   | Amount |  | (A) or<br>(D) | Price   | •   | Reported<br>Transaction(s)<br>(Instr. 3 and 4) |              |   | (Instr. 4)  |   |   |   |
| Common Stock 01/02/  |   |  |  |       |   |  |   |        | A <sup>(1)</sup>   |               | 721   | 721 A   |  | \$2.0        | )8 <sup>(1)</sup>   | 721   |   | D   |   |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |   |  |  |       |   |  |   |        |  |               |   |   |  |              |   |   |   |   |   |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)  | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date<br>if any<br>(Month/Day/Yea | Date, | 4.<br>Transaction<br>Code (Instr.<br>8) |  | n of  |        | 6. Date Exercisable<br>Expiration Date<br>(Month/Day/Year) |               | е   | le and 7. Title and Amount of Securities Underlying Derivative Security (Instr. and 4)  Amoun |  |              |   | vative<br>urity<br>ir. 5)   | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s<br>(Instr. 4) | Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | Beneficial<br>Ownership<br>t (Instr. 4) |
|  |   |  |  |       | Code                                    | v  | (A)   |        | Date<br>Exercisal  |               | Expiration<br>Date                                | Title   | of   | mber<br>ares |   |   |   |   |   |

## **Explanation of Responses:**

1. Shares are issued under registrant's Non-Employee Director Compensation Plain in lieu of cash payment for director fees for the fourth quarter of 2008 in the amount of \$1,500. The shares granted were calculated using the closing price of the issuer's common stock as reported on the NASDAQ Global Market on January 2, 2009.

/s/ Dale E. Messick, Attorney-

In-Fact

\*\* Signature of Reporting Person Date

01/05/2009

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.