FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

MENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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* Backus John G | | | | | 2. Issuer Name and Ticker or Trading Symbol LUNA INNOVATIONS INC [LUNA] | | | | | | | Relationship neck all appl X Direct | icable) | Person(s) to Is | | |
|--|---|---------------------|--|------|---|-------|-----|--|--------------------|---|--|---|---|--|---|--|
| (Last) | ` | rst) (| Middle) | | 3. Date of Earliest Transaction (Month/Day/Year) 08/09/2007 | | | | | | | Office below | r (give title) | Other (below) | specify | |
| 1703 S. JEFFERSON STREET, SW SUITE 400 | | | | 4. | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | |
| (Street) | KE VA | A : | 24016 | | | | | | | | | X Form | filed by More t | Reporting Perso | | |
| (City) | (Si | tate) (| 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 | | | Code (Ins | | | | Benefic | ties Fo cially (D) Following (I) | Ownership orm: Direct O) or Indirect) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | | | | Code V | Amoui | t (A) (D) | Price | Transac (Instr. 3 | tion(s) | | (11150.4) | |
| Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | se (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year | Code | action (Instr. | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Securit (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) | |
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiratior Date | Title | Amount or Number of Shares | | | | | |
| Stock Unit | (1) | 08/09/2007 | | A | | 1,025 | | (2) | (3) | Common Stock | 1,025 | \$4.15 | 1,025 | D | | |

Explanation of Responses:

- 1. Stock Units convertible into registrant's common stock on a 1-for-1 basis.
- 2. Stock Units issued under the registrant's Non-Employee Director Deferred Compensation Plan. The Stock Units become issuable in common stock of the registrant at the election of the reporting person upon reporting person's termination of service, a change of control of the registrant, an unforseeable emergency, or a fixed date selected by the reporting person.
- 3. Stock Units issuable under the registrant's 2006 Equity Incentive Plan, which expires June 6, 2016.

Aaron S. Hullman, Esq., 08/13/2007 attorney-in-fact

** Signature of Reporting Person Date

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

- * 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.