

May 8, 2006

VIA EDGAR, E-MAIL AND MESSENGER

Securities and Exchange Commission
Division of Corporate Finance
100 F Street, N.E.
Washington, D.C. 20549-6010

Mail Stop 6010

Attention: Mr. Jeffrey P. Riedler
Ms. Sonia Barros
Ms. Suzanne Hayes
Ms. Tabatha Akins
Mr. Oscar Young

Re: Luna Innovations Incorporated
Registration Statement on Form S-1 (File No. 333-131764)
Initially filed on February 10, 2006
Amendment No. 2 filed on April 10, 2006
Amendment No. 3 filed on April 28, 2006

Ladies and Gentlemen:

On behalf of Luna Innovations Incorporated (the "**Company**"), we respectfully submit this letter as a supplement to our letter to you dated April 27, 2006 (the "**April 27 Response Letter**") and each of our letters to you dated May 4, 2006 (the "**First and Second Supplemental Response Letters**"), and in response to our telephone discussions with you on May 5th, 2006.

In the April 27 Response Letter, we submitted for review the Company's response to comments from the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") received by letter dated April 24, 2006 (the "**April 24 SEC Comment Letter**"), relating to the Company's Amendment No. 2 ("**Amendment No. 2**") to the Registration Statement on Form S-1 (File No. 333-131764) filed with the Commission on April 10, 2006 (the "**Registration Statement**"). Concurrent with its filing of the April 27 Response Letter, the Company filed via EDGAR Amendment No. 3 to the Registration Statement ("**Amendment No. 3**"). We provided supplemental responses to certain comments from the Staff in the First and Second Supplemental Response Letters. In this letter, we have provided a further

supplemental response to the Staff's comment number 11 contained in the April 24 SEC Comment Letter. All capitalized terms not defined herein have the meanings given to them in the Registration Statement and the First and Second Supplemental Response Letters.

9. Stockholders' Equity, page F-19

11. *In the conclusion to your response to prior comment 55, you noted that the increase in the fair value of the stock could not be attributed to a single factor but reflects a number of factors. As such, please elaborate on the extent to which each of the factors contributed to the increase, with as much quantification as possible. In addition, please update your analysis through the date of your next and any subsequent responses or amendments. When you have an estimate of the IPO price, please ensure that you have sufficiently discussed the factors contributing to the difference between the fair value of the stock at the issuance date and the estimated IPO price, as contemplated by part f. of our comment.*

THIRD SUPPLEMENTAL RESPONSE TO COMMENT 11:

In response to the Staff's comment and subsequent conversations with the Staff on May 3rd, 4th and 5th, the Company is supplementally providing the following information for the Staff's consideration in connection with the Company's pricing of stock option grants made on November 11, 2005. The following information includes a quantitative and qualitative discussion of the factors influencing the valuation of the Company's nonvoting Class B Common Stock, par value \$0.001 per share (the "**Nonvoting Class B Common Stock**") underlying options granted on this date. All share and per share numbers in this letter reflect a 1-for-1.7691911 reverse stock split that the Company intends to effect immediately prior to the closing of the offering.

I. SUMMARY

On November 11, 2005, options to purchase an aggregate of 895,813 shares of Nonvoting Class B Common Stock were granted with an exercise price of \$1.77 per share. These options were previously considered for grant by the Company's Board of Directors (the "**Board**") on October 20, 2005 and October 27, 2005, but the actual grant of the options was delayed until such time as a committee of the Board could determine the fair market value per share of the Company's Nonvoting Class B Common Stock. On November 11, 2005, following delivery and review of a contemporaneous valuation report prepared by an independent third-party valuation

expert, the fair market value of the Company's Nonvoting Class B Common Stock on that date was determined to be \$1.77 per share.

On May 4, 2006, certain members of the Company's management and the Board (the "**Review Committee**") reviewed the fair market value of the Company's Nonvoting Class B Common Stock as of November 11, 2005 in light of comments from the Staff and concluded that \$3.00 per share could be used as a reasonable valuation of the Nonvoting Class B Common Stock on that date. However, following (i) the filing of the First and Second Supplemental Response Letters and (ii) discussions with its independent registered public accounting firm and members of the Company's audit committee, the Company's management determined that there was no evidence to support a basis for the \$3.00 per share valuation and requested that the Review Committee reconsider its conclusion. Upon reconsideration, the Review Committee concluded that there was no evidence in existence—even in hindsight—to support a retroactive change to the Board's original determination of \$1.77 per share, which determination was made in consideration of a contemporaneous third-party valuation report at the time.

The Review Committee considered various financial, technical and business factors—each of which is discussed in detail below—in its reconsideration of the fair market value of the Company's Nonvoting Class B Common Stock on November 11, 2005. However, the Review Committee concluded that the best supportable evidence for a determination of fair market value on that date was data provided by the contemporaneous valuation report delivered by the independent third-party valuation expert.

The Review Committee also considered the materiality to the Company's financial statements of changes to the \$1.77 fair market value determination. In light of the fact that the valuation of the Nonvoting Class B Common Stock is not an item capable of precise measurement, the Review Committee considered a range of potential values and concluded that even if the \$1.77 valuation differed by as much as 25% to 50%, any resulting compensation charge would be immaterial to fiscal year 2005 and to the quarter ended March 31, 2006.

II. HISTORICAL CONTEXT OF NOVEMBER 11, 2005 OPTION GRANTS

On October 20, 2005 and October 27, 2005, the Board considered the award of options to purchase an aggregate of 895,813 shares of Nonvoting Class B Common Stock and established a special committee of the Board to determine the per share valuation of the Nonvoting Class B Common Stock underlying the options (the "**Special Pricing Committee**"). The Board directed the Special Pricing Committee to determine the exercise price for these options after

consideration of all relevant factors regarding the Company's Nonvoting Class B Common Stock available at that time. Consistent with guidance from the American Institute of Certified Public Accountants (the "AICPA"), the Board and the Special Pricing Committee considered several factors and discussed the benefit of obtaining a contemporaneous valuation of the Company's Nonvoting Class B Common Stock performed by an independent third-party valuation expert. Accordingly, the Company engaged an independent third-party appraiser, the Clawson Group ("Clawson"), to assist in the determination of the per-share fair market value of the Company's Nonvoting Class B Common Stock and to deliver a valuation report to the Special Pricing Committee and the Board for consideration.¹

Clawson's contemporaneous third-party valuation report concluded that the value of the Nonvoting Class B Common Stock on September 30, 2005 was \$1.63 per share. Among other factors, the valuation report considered and included the effects of a prior investment in the Company by Carilion Health System and the Company's September 30, 2005, acquisition of Luna Technologies, Inc. On November 11, 2005, following receipt and review of Clawson's contemporaneous report and in light of the findings set forth therein, and in recognition of certain modest integration activities of the operations of Luna Technologies in the 42 days between September 30, 2005 and November 11, 2005, the Special Pricing Committee determined that the fair market value of the Nonvoting Class B Common Stock on November 11, 2005 was \$1.77 per share. Accordingly, on November 11, 2005, the options to purchase an aggregate of 895,813 shares of Nonvoting Class B Common Stock that were considered by the Board on October 20, 2005 and October 27, 2005 were granted with an exercise price of \$1.77 per share (the "**November 11 Options**").

The Company has reviewed the fair market value of the Company's Nonvoting Class B Common Stock as of November 11, 2005 in response to comments from the Staff in connection with its review of the Company's Registration Statement. Following discussions between the Company and the Staff on May 3rd and 4th, 2006, the Review Committee reviewed the valuation of Nonvoting Class B Common Stock as of November 11, 2005 and concluded, in hindsight, that \$3.00 per share could be used as a reasonable valuation of the Nonvoting Class B Common Stock on that date.

¹ The curriculum vitae of Mr. Kace Clawson of the Clawson Group was previously provided to the Staff supplementally as an appendix to the Company's letter dated April 10, 2006, in response to comments from the Staff received by letter dated March 10, 2006, relating to the Company's initial filing of the Registration Statement with the Commission on February 10, 2006.

However, following (i) the filing of the First and Second Supplemental Response Letters and (ii) discussions with its independent registered public accounting firm and members of the Company's audit committee, the Company's management determined that there was no basis for a change in fair value to \$3.00. In light of the lack of supportable evidence for the \$3.00 valuation, the Company requested that the Review Committee reconsider the valuation of the Nonvoting Class B Common Stock as of November 11, 2005. Upon reconsideration, the Review Committee concluded that the determination of the valuation was highly judgmental in nature, and that although it would be possible to consider a reasonable range of valuations, there was no evidence in existence to support a retroactive change to the Board's and the Special Pricing Committee's original determination of \$1.77 per share.

III. FINANCIAL, TECHNICAL AND BUSINESS CONSIDERATIONS

The Review Committee considered various financial, technical and business factors—each of which is discussed in detail below—in its reconsideration of the fair market value of the Company's Nonvoting Class B Common Stock as of November 11, 2005. However, the Review Committee concluded that the best supportable evidence for a determination of fair market value on that date was data provided by the contemporaneous valuation report delivered by the independent third-party valuation expert.

A. Financial Considerations: The Independent Third-Party Valuation Report

The purpose of Clawson's September 30, 2005 valuation report was to assist the Board and the Special Pricing Committee in determining the fair market value of the Company's Nonvoting Class B Common Stock for the purpose of establishing the exercise price for the November 11 Options. As discussed above, Clawson determined the value of one share of the Company's Nonvoting Class B Common Stock to be \$1.63 as of September 30, 2005 on a minority, non-marketable basis. As indicated in the summary transmittal letter of Clawson's valuation report, Clawson determined the above-mentioned value by application of various industry-accepted valuation methodologies including a market-based analysis and a discounted cashflow model. These methodologies took into account—as of September 30, 2005—various developments occurring at the Company including the two most significant milestones achieved by the Company in 2005: the closing of the Company's first round of outside financing and the acquisition of Luna Technologies, Inc.

This report was issued contemporaneously with the pricing of the November 11 Options. Consistent with AICPA guidance, the Special Pricing Committee considered the analysis of fair

market value in Clawson's report to be the best available evidence of the Company's valuation on that date since it was performed contemporaneously and was considered to be unbiased. In fact, the Board and the Special Pricing Committee had postponed the granting of the November 11 Options until it had received and adequately reviewed Clawson's September 30, 2005 valuation report.

The decision by the Company and its Board to obtain and rely upon data provided by a third-party valuation expert is consistent with best practices advocated by the 2004 AICPA Practice Aid, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation" (the "**Practice Aid**"). The Practice Aid was commissioned by the AICPA as part of a project to provide better guidance to preparers, auditors and valuation specialists in valuing privately held securities in advance of an initial public offering.² In particular, the Practice Aid recommends that privately-held companies obtain a contemporaneous valuation from an independent valuation specialist in assisting the Company in the determination of fair value of securities issued as compensation. The Practice Aid asserts that a contemporaneous valuation by an independent party is more objective and provides more persuasive evidence of fair value than a retroactive valuation and one that is performed by a related party. Complying with best practices outlined in this guidance, the Board obtained the contemporaneous valuation report dated September 30, 2005 and, following adequate review, used such report as the basis for establishing fair value of the Nonvoting Class B Common Stock and setting the exercise price of the November 11 Options.

Furthermore, had the Company not obtained an independent contemporaneous valuation, the Practice Aid recommends that a company provide more extensive disclosures about the milestones that occurred between the date the securities were issued and the date on which the fair value was determined. The Company has endeavored to make such disclosures through its past supplemental responses, its conversations with the Staff, and most recently, this supplemental disclosure.

² The Practice Aid was developed by the AICPA staff and a project task force comprising representatives from appraisal, preparer, public accounting, venture capital, and academic communities. Observers to the project task force included representatives from both the SEC and FASB. The Practice Aid's guidance is applicable whether a privately-held company applies APB Opinion 25, "Accounting for Stock Issued to Employees" (as the Company did prior to December 31, 2005) or Statement 123(R), "Share-Based Payment" (as the Company did after December 31, 2005).

B. Technical Considerations

The Review Committee also considered the speculative nature and nascent stage of much of the Company's technology, as well as the considerations described in the Company's Registration Statement under the heading "Risk factors." Certain of these technical considerations are described in detail below, and contributed to the Review Committee's conclusion that the valuation of the Nonvoting Class B Common Stock as of November 11, 2005 was highly qualitative and judgmental in nature.

1. MRI Contrast Agent Research and Development

As discussed in the Registration Statement, the Company's magnetic resonance imaging, or MRI, contrast agent will require FDA approval as a new drug before it can be marketed in the United States. The product development cycle for new drugs is extremely risky and valuation for new pharmaceutical product candidates can rise by several orders of magnitude as development moves from early-stage clinical trials to late-stage clinical trials. Luna's MRI contrast agents are still in early pre-clinical stages of development and therefore subject to significant technological and regulatory risk. Furthermore, little technical progress was made in identifying or synthesizing lead product candidates during the fourth quarter of 2005, explaining in part why this technology's valuation did not result in an impact to overall Company valuation between September 30, 2005 and December 31, 2005, the valuation dates of reports by the Company's independent third-party valuation specialist.

In general, obtaining FDA approval for a new drug has historically been a costly and time-consuming process. The Company is still very early in the new drug development process. Until technological and regulatory risks are overcome, the value attributable to new product candidates (i.e., in future cash flows or as part of a valuation model terminal value) must be discounted. The amount of such discount is inherently subjective and reasonable estimates by different parties can vary substantially. For example, valuation estimates of the Company must take into account the fact that the Company does not anticipate completing FDA approval for its MRI contrast agent product for several years. The Company anticipates spending approximately \$4 million to \$6 million to develop disease-targeting MRI contrast agents and other nanomaterial applications through completion of pre-clinical trials and the filing of an Investigational New Drug application for a lead contrast agent during the next two years. In addition, it anticipates spending approximately \$2 million to \$3 million during this same period to complete FDA Phase I clinical trials for one lead disease-targeting MRI contrast agent, which will include generation of preliminary efficacy data.

2. *Quantitative Ultrasound Product Research and Development*

The Company's ultrasound products are likewise characterized by significant technological development and regulatory risks that are outside of the Company's control. In particular, the Company's first medical device product developed using its quantitative ultrasound technology platform—its Emboli Detection and Classification, or EDAC, diagnostic device—is still in pre-clinical development.

The Company's EDAC product will be regulated by the FDA as a medical device rather than a drug. The nature of the FDA requirements applicable to devices depends on their classification by the FDA. A device developed by the Company would be automatically classified as a Class III device, requiring pre-market approval, unless the device was substantially equivalent to an existing device that has been classified in Class I or Class II or to a pre-1976 device that has not yet been classified or the Company convinces the FDA to reclassify the device as Class I or Class II. Class I or Class II devices require registration through the 510(k) exemption. If the Company is unable to demonstrate such substantial equivalence and unable to obtain reclassification, it would be required to undertake the costly and time-consuming process, comparable to that for new drugs, of conducting preclinical studies, obtaining an investigational device exemption to conduct clinical tests, filing a pre-market approval application, and obtaining FDA approval.

In addition to facing these technological and regulatory risks, the Company was precluded from manufacturing or selling this product in the United States until March 31, 2006, because a key patent on the technology was held by an independent third party. The Company executed a non-binding letter of intent to acquire this patent and the related intellectual property in January 2006. The negotiation of the acquisition terms and conditions was conducted over the following two months and acquisition of this technology closed on March 31, 2006. These events postdated the grant of the November 11 Options and also Clawson's valuations reports on September 30 and December 31, 2005. As a result, although the Company's future valuations as a public company include significant revenue and cash flows from its innovative ultrasound technologies, these sources of revenue and cash flow were not yet realizable on November 11, 2005.

3. *Other Technological Progress*

Although the Company continued to bid for and was awarded additional research contracts between September 30, 2005 and December 31, 2005, no significant objective progress was made in the commercialization of its other primary product candidates in the fourth quarter of 2005. As a result, technological advancements did not significantly impact the assumptions used to determine the Company's valuation between September 30 and December 31, 2005.

C. SBIR Revenue Considerations

In late 2005 the Company had engaged in preliminary discussions with investment banking firms about alternative forms of financing including an initial public offering of the Company's common stock. However, for the reasons outlined below, no financing materialized from these discussions, and it was not until February 2006 that the Company had any assurance that it would *ever* be able to go public due to a confluence of certain factors that the Company believes are unique to its business model and its financial arrangements at the time.

In short, public company valuations were not relevant to any analysis of the Company's valuation in the fourth quarter of 2005 due to the Company's dependence on Small Business Innovation Research ("**SBIR**") funding as its primary source of revenue. Specifically, several factors outside of the Company's control could have jeopardized the Company's continued eligibility for SBIR funding. These factors included the risk of sudden loss of this revenue source should the Company not continue to be owned by individual investors and option holders, Carilion Health System's contractual right to invest an additional \$8 million in equity at any time, and, in the event the Company did conduct a public offering, the ability of existing individual stockholders and option holders to sell their holdings into the public markets at any time after the lock-up period, thereby transferring ownership from individuals to presumably institutional investors. These factors and their relevance to the Company's ability to effect an initial public offering for its stock are discussed below.

The information considered by the Special Pricing Committee when determining the exercise price of the November 11 Options included the following:

- 1) As of November 11, 2005, Carilion Health System had the right, at its sole discretion, to invest an additional \$8 million in the Company in exchange for an aggregate of 1,705,178 shares of Class C Common Stock, pursuant to that certain Class C Common Stock Purchase Agreement dated August 2, 2005. Such Class C Common Stock would have

been convertible into 1,705,178 shares of Common Stock of the Company upon an initial public offering and represented approximately 17% of the Company's equity on a fully-diluted basis as of December 31, 2005.

- 2) Carilion Health System's total equity ownership of the Company immediately following an investment of the \$8 million would have represented approximately 30% of the Company's equity on a fully diluted basis.
- 3) Non-individual stockholders held an aggregate of approximately 634,203 shares of Nonvoting Class B Common Stock on November 11, 2005, representing approximately 6% of the Company's equity on a fully diluted basis as of December 31, 2005.
- 4) As a consequence of the aggregate stock ownership by non-individual stockholders described above, and assuming that an initial public offering of the Company's Common Stock would involve shares representing 20% to 25% of the Company's outstanding fully-diluted equity, any such attempted initial public offering would have resulted in total non-individual stock ownership of the Company in the range of 56% to 61%. Corresponding individual ownership would have therefore been in the range of 39% to 44%.
- 5) In order to qualify for SBIR contracts and grants, at least 51% of the Company's equity must be owned and controlled by U.S. citizens or permanent resident aliens, or by another entity that is at least 51% owned and controlled by U.S. citizens or permanent resident aliens. Further, the Company must be able to certify that it meets the SBIR ownership and size requirements as of the time it enters into each SBIR contract or grant. Because of this limitation, an initial public offering of common stock as of November 11, 2005 would have made the Company ineligible for future SBIR contracts.
- 6) Because SBIR contracts represented approximately 60% of the Company's revenue as of December 31, 2005, preliminary conversations with underwriters indicated that an initial public offering of the Company's public stock was not possible unless and until certain changes could be made to the Company's capitalization structure to ensure that the Company was able to maintain SBIR eligibility (i.e., maintain individual ownership of the Company's capital stock at a percentage of at least 51%) for the foreseeable future.

- 7) In order to preserve the Company's ability to conduct an initial public offering of its Common Stock in early 2006, the Company took the following actions between November 11, 2005 and the initial filing of the Company's Registration Statement on February 10, 2006:
- a. In mid-December 2005, the Company initiated negotiations with Carilion Health System to restructure the August 2, 2005 Class C Common Stock Purchase Agreement (which included Carilion's right to invest an additional \$8 million in the Company). The Company's initial position was that Carilion Health System would need to give up its right to some or all of the additional \$8 million investment in order for the Company to preserve its SBIR eligibility. Carilion Health System, however, was unwilling to give up its right to future investments. To help resolve the impasse, the Company engaged outside counsel with expertise in the area of SBIR funding to help identify alternative financing structures that would allow Carilion Health System to retain the benefit of its right to invest in the Company while not jeopardizing the Company's ability to qualify for SBIR funding in the event it decided to pursue an initial public offering. Ultimately, these negotiations resulted in the termination of the August 2, 2005 Class C Common Stock Purchase Agreement and the closing of an additional \$3 million equity investment and \$5 million convertible note investment by Carilion Health System on December 30, 2005. This change was critical to the Company's ability to preserve its SBIR eligibility because the \$5 million convertible note financing would not be counted as outstanding equity for purposes of the SBIR individual ownership test. This late-December 2005 transaction was a critical initial step in the Company's ability to demonstrate that it would remain SBIR-eligible immediately following an initial public offering.
 - b. The restructuring of \$5 million of Carilion Health System's investment from equity to debt improved the Company's individual ownership percentage to the range of 49% to 54%, assuming sale of additional common stock to institutional investors in an initial public offering. However, a substantial percentage of the Company's individual stockholders and option holders would be able to sell their outstanding stock (or sell stock issuable upon exercise of then-vested options) upon the expiration of a customary lock-up following an initial public offering. This transfer of equity ownership from known individual stockholders to unknown institutional stockholders in open market transactions would further decrease the Company's individual ownership and would likely have caused the Company to become ineligible for SBIR funding within a year following the Company's initial public offering.³ Therefore, in order to proceed with an initial

³ Preliminary discussions with the Company's investment bankers indicated that up to 95% of the initial public offering shares would be sold to and held by institutional (i.e., non-individual) investors. Subsequent open market sales were also likely to involve non-individual institutional purchasers. In the absence of any guidance on the matter from the Small Business Administration regarding assumptions that could be made about individual ownership of publicly held shares, and given the magnitude of the risk to the Company if it underestimated individual ownership, the Company has assumed that all publicly held shares would not be individually owned.

public offering, it was also necessary to implement a mechanism to restrict future sales of equity by individual employees in the open market to reduce the risk that the Company could lose SBIR eligibility shortly following an initial public offering.

- c. Accordingly, throughout January 2006, the Company and its outside advisers considered various alternative mechanisms to reduce the risk of loss of SBIR eligibility resulting from a large overhang of vested employee options. Ultimately, in early February 2006, the Company implemented a program whereby each employee of the Company agreed to execute a stock sale restriction agreement, pursuant to which such employee is contractually prohibited from selling more than 20% of his or her equity holdings (including shares of common stock received upon exercise of vested stock options) in each calendar year.⁴ In addition, the Company issued additional unvested options on February 8, 2006, in order to increase the number of unvested shares held by individuals that would not be eligible for sale on the public market for some period of time following an initial public offering.

D. Other Business Issues

In addition to the factors discussed above, certain other facts and circumstances had a bearing on the Company's valuation at November 11, 2005. These circumstances included uncertainty about the timing and potential financial impact caused by changing the Company's fiscal year end and requiring audits of the Company's financial statements for the years ended December 31, 2002, 2003, 2004 and 2005 (the "**Relevant Audit Periods**").⁵ Specifically, in November 2005, the Company decided to hire new independent auditors for the Relevant Audit Periods. The engagement of a reputable accounting firm and completion of audit fieldwork was a prerequisite to the initial filing of the Company's Registration Statement in 2006. However, as

⁴ Certain members of the Company's senior management, including the Section 16 named executive officers, executed a more restrictive stock sale restriction agreement that prohibited such senior management member from selling more than 15% of his or her equity holdings (including shares of common stock received upon exercise of vested stock options).

⁵ The audit of these periods also involved a change in the Company's fiscal year end from October 31 to December 31. Such change added additional complexity to the audit of the Relevant Audit Periods and created additional uncertainty about the time to complete such audits.

of November 2005, it was not clear when the audit work would begin and when it would be completed. By December 2005, the Company had selected Grant Thornton as its independent auditors and had initiated fieldwork for the Relevant Audit Periods. As a result, the Company could not estimate as of November 11, 2005 when the audit of the Relevant Audit Periods, which were necessary for filing of the Company's Registration Statement, would be completed.

IV. MATERIALITY ANALYSIS

Notwithstanding any of the foregoing to the contrary, the Company and its independent auditors believe that the valuation of equity securities of privately held companies inherently involves judgments by the valuing party and, as a result, that a range of reasonable values is possible at any given point in time. In light of the fact that the valuation of the Nonvoting Class B Common Stock is not an item capable of precise measurement, the Review Committee considered a range of potential values between the \$1.63 valuation provided by the independent valuation specialist as of September 30, 2005, and subsequent valuations. As a result of this analysis, the Review Committee and the Company have concluded that even if the Company's assessment of fair value on November 11, 2005 of \$1.77 per share of Nonvoting Class B Common Stock differed in value by as much as 25% to 50%, that such resulting change would result in a compensation charge that would be immaterial to fiscal year 2005 and the quarter ended March 31, 2006.

In making this determination, the Company relied on guidance provided by SEC Staff Accounting Bulletin No. 99 – Materiality, issued August 12, 1999 (“SAB 99”). As part of this guidance, the Staff noted that use of quantitative thresholds or “rule of thumb” (e.g., five percent) to evaluate whether a change in an item might be considered material is appropriate only as an initial step in assessing materiality. As the Staff points out in SAB 99, exclusive reliance on this or any percentage or numerical threshold has no basis in the accounting literature or the law. Rather, a matter is “material” if there is a substantial likelihood that a reasonable person would consider it important. In its Statement of Financial Accounting Concepts No. 2, the FASB stated that “the omission or misstatement of an item in a financial report is material if, in the light of surrounding circumstances, the magnitude of the items is such that it is probable that the judgment of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.”⁶

⁶ The SEC further noted that this formulation in the accounting literature is in substance identical to the formulation used by the courts in interpreting federal securities laws.

Under the governing principles of SAB 99, an assessment of materiality requires that one views the facts in the context of the “surrounding circumstances” (as the accounting literature puts it), or the “total mix” of information (in the words of the U.S. Supreme Court). In the context of a misstatement of a financial statement item, SAB 99 notes that the “total mix” includes the size of the misstatement as well as the factual context in which the user of financial statements would view the financial statement item. In short, an analysis of materiality must consider both quantitative and qualitative factors. Accordingly, with respect to a potential misstatement of the valuation of the Company’s Nonvoting Class B Common Stock on November 11, 2005, the Company and its Board considered the following factors:

- a change in compensation expense related to the November 11 Options is a non-cash charge to operations that is amortized over the relevant vesting period of such options (i.e., generally four years) and, as a result, a misstatement of this item would not mask a change in operating results or other trends;
- a misstatement of this item does not change a net loss into net income, or vice versa, during the relevant audit period (as noted in the Company’s consolidated statement of operations, it sustained a pretax loss of approximately \$2.5 million for the year ended December 31, 2005);
- a misstatement of this item does not affect the Company’s compliance with SEC regulatory requirements;
- a misstatement of this item does not affect the Company’s compliance with loan covenants or other contractual obligations or requirements; additionally, the Company has no outstanding borrowings under its current credit facility;
- a misstatement of this item does not involve concealment of an unlawful transaction;
- although there would potentially be a compensation charge, the adjustment would not have any impact on total assets, total liabilities, or stockholders’ equity; and
- the nature of such an adjustment is highly judgmental and is subject to significant assumptions and estimates.

Therefore, after consideration of both qualitative and quantitative factors surrounding a potential misstatement of compensation expense due to a change in valuation of 25% to 50%, the Company has concluded that such a misstatement would not be material to the Company’s financial statements for the annual period ended December 31, 2005 and interim financial information for the three-month period ended March 31, 2006.

V. CONCLUSION

As discussed above, there is no auditable evidence in existence—even in hindsight—to support a retroactive change to the Board’s original determination of \$1.77 per share for the Company’s Nonvoting Class B Common Stock as of November 11, 2005, which determination was made in consideration of a contemporaneous third-party valuation report at the time. Moreover, even if the \$1.77 valuation differed by as much as 25% to 50%, any resulting compensation charge would be immaterial to fiscal year 2005 and to the quarter ended March 31, 2006.

* * *

Please direct your questions or comments to the undersigned at (703) 734-3105 (office) or (703) 864-6313 (mobile), or to Trevor J. Chaplick at (703) 734-3106. In addition, we would request that you provide a facsimile of any additional comments you may have to the attention of Mr. Chaplick and the undersigned at (703) 734-3199. Thank you for your assistance.

Very truly yours,
WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Mark R. Fitzgerald

Mark R. Fitzgerald

cc: Kent A. Murphy, Ph.D.
Aaron S. Hullman, Esq.
Luna Innovations Incorporated
Trevor J. Chaplick, Esq.
Wilson Sonsini Goodrich & Rosati, Professional Corporation
Marjorie Sybul Adams, Esq.
Daniel I. Goldberg, Esq.
DLA Piper Rudnick Gray Cary US LLP