



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0405

Mail Stop 3561

May 23, 2008

Mr. Patrick C. Shutt
Chief Executive Officer
Capital Growth Systems, Inc.
500 W. Madison Street
Suite 2060
Chicago, Illinois 60661

RE: Capital Growth Systems, Inc.
Form 10-KSB for Fiscal Year Ended December 31, 2007
Filed April 14, 2008
Form 10-QSB for Fiscal Quarter Ended March 31, 2008
Filed May 16, 2008
File No. 0-30831

Dear Mr. Shutt:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB for Fiscal Year Ended December 31, 2007

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters,
page 7

1. Please provide the high and low sales prices for each quarter within the last two fiscal years. If applicable, please clarify your disclosure to indicate that the prices represent the range of high and low bid information for your common stock and that the quotations reflect inter-dealer prices without retail market-up, mark-down or commission and may not represent actual transactions. Otherwise, please advise.

Item 6. Management's Discussion and Analysis and Plan of Operations, page 7
Overview, page 7

2. Please revise to include a discussion of the following matters:
 - economic or industry-wide factors relevant to your business;
 - your lines of business, locations of operations, principal products and services and a description of how you earn revenues and generate cash;
 - your fiscal 2006 acquisitions;
 - the discontinuation of your network performance management and interconnect businesses; and
 - the actions you are taking to increase revenues and achieve a profitable level of operations.

Refer to Item 303 of Regulation S-B and Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, Release No. 33-8350, available on our web site at <http://www.sec.gov/rules/interp/33-8350.htm>.

3. Please tell us how to reconcile the capital activity disclosed in the second full paragraph on page eight to the disclosures in your financial statements. Consider whether additional disclosure here and/or in the notes to your financial statements would facilitate an investor's understanding of the capital transactions.

Results of Operations, page 8
2007 vs. 2006

4. Please include a discussion of loss from discontinued operations and clearly identify your discussion of results of operations in regard to continuing operations. Your discussion of discontinued operations should focus on revenues and pre-tax loss reported in discontinued operations, including a discussion of impairment losses.
5. Please quantify and discuss revenues and gross margins for each product and service or each group of similar products and services for each year presented. Please also expand your analysis to discuss the dollar impact of shifts in staff utilization and product mix on gross margin.
6. Please tell us how to reconcile your disclosure in the third full paragraph on page nine regarding amortization of the fair value assigned to warrants and the beneficial conversion feature to the non-cash charges disclosed in the consolidated statements of cash flow. Consider whether additional disclosure here and/or in the notes to your financial statements would facilitate an investor's understanding of the non-cash charges.

2006 vs. 2005

7. Please revise to include a discussion of results of operations from continuing operations. Also, your discussion of discontinued operations should focus on revenues and pre-tax loss reported in discontinued operations, including a discussion of impairment losses. Refer to Rule 303(b)(1) of Regulation S-B.

Liquidity and Capital Resources, page 9

8. In your discussion of cash used in operating activities from continuing operations, please also identify the items accounting for the significant variance between operating loss and net cash used in operating activities for fiscal year 2006. Please also provide a discussion of the reasons underlying the changes between the years presented. To facilitate your analysis, please provide a discussion of your significant financing transactions during the years presented.

Item 7. Financial Statements, page 14

9. It does not appear that you had sufficient authorized and unissued shares available to share settle outstanding convertible preferred stock and debt instruments, warrants and stock options as of December 31, 2006. If so, please tell us your basis in GAAP for classifying outstanding preferred stock, warrants and stock options and the embedded conversion features of convertible debt instruments as

permanent equity as opposed to temporary equity or liabilities as appropriate. In your response, please address the requirements of EITF 00-19 and EITF D-98, as applicable, with respect to each instrument outstanding at December 31, 2006. Otherwise, please tell us why you believe you had sufficient authorized and unissued shares available to share settle the instruments. In addition, please tell us the method you use to determine which contracts or portions of contracts should be reclassified pursuant to the provisions of EITF 00-19.

Consolidated Statements of Shareholders' Equity, page 18

10. Please tell us the items and their amounts included in warrants issued with debt financing in 2006 or tell us how to reconcile the amount to the disclosure in note six.
11. Please tell us whether there are any disclosures in the notes to financial statements regarding stock issued for consulting services, warrants issued to employees and warrants issued to consultants in 2006. If so, please direct us to the disclosures. To the extent applicable, please revise your footnote disclosures to provide the information required by paragraph 64 of SFAS 123(R).
12. Please tell us the items and their amounts included in stock warrants issued with debt financing in 2007 or tell us how to reconcile the amount to the disclosure in note six.
13. Please tell us the items and their amounts included in stock and warrants issued for services in 2007 or tell us how to reconcile the amount to the disclosure in the notes to financial statements. To the extent applicable, please revise your footnote disclosures to provide the information required by paragraph 64 of SFAS 123(R).

Consolidated Statements of Cash Flows, page 20

14. It appears that paragraphs 28 – 29 of SFAS 95 require a reconciliation of net income to net cash flow from operating activities. Please tell us why your presentation complies with this guidance.
15. Please disclose gross proceeds from debt obligations and repayments of debt obligations in cash flows from financing activities as opposed to reporting such transactions on a net basis to the extent the debt obligations do not qualify for net reporting. In addition, please tell us which debt obligations you believe qualify for net reporting. Refer paragraphs 11 – 13 and 18 – 20 of SFAS 95.
16. Please tell us how to reconcile the fiscal 2007 amounts for consulting expenses paid in common stock and warrants, stock warrant expense related to debt

financing, stock based compensation and issuance of stock to the amounts disclosed in the consolidated statements of shareholders' equity.

17. Please separately present cash proceeds from exercise of share options and similar instruments granted under share-based payment arrangements in cash flows from financing activities or disclose the amount of cash received from exercise of share options and similar instruments granted under share-based payment arrangements in the notes to your financial statements. Refer to paragraph A240.i. of SFAS 123R.
18. Please tell us the items and their amounts included in each of the line items presented in non-cash investing and financing activities for fiscal 2007.

Notes to Consolidated Financial Statements, page 21

19. Given the significance of your convertible securities financing transactions, please disclose your accounting policies for convertible securities with beneficial conversion features or contingently adjustable conversion ratios. Refer to APB 22. At a minimum, please address the following:
 - Allocation of proceeds received in financings to convertible instruments and other detachable instruments included in the exchange and computation of the intrinsic value of conversion options;
 - Determination of fair values of convertible instruments and other detachable instruments included in the exchange;
 - Recognition of contingent conversion features that reduce the conversion price if the fair value of the underlying stock declines after the commitment date;
 - Amortization of discounts resulting from the allocation of proceeds to the separate instruments in transactions;
 - Recognition and amortization of beneficial conversion features for conversion price changes because of issuances of stock at lower prices;
 - Recognition of extinguishment gains and losses;
 - Determination of the commitment date and measurement of the intrinsic value of beneficial conversion options in convertible instruments that are underlying mandatory notes and warrants; and
 - Other significant policies.

20. Please disclose the types of expenses that you include in the cost of good sold line item.

Note 1. Organization and Basis of Presentation, page 21

21. Please disclose the pertinent rights and privileges of the Series B preferred stock, including dividend and liquidation preferences, participation rights, call prices and dates and other significant terms. Refer to SFAS 129.

Note 2. Summary of Significant Accounting Policies, page 23
Revenue Recognition, page 25

22. Please provide a more detailed description of multiple deliverable arrangements including performance, cancellation, termination or refund-type provisions and your policies for determining whether the deliverables are separable into units of accounting. Refer to paragraph 18 of EITF 00-21.
23. Please disclose whether you recognize software license and maintenance revenue ratably over the term of the license and maintenance arrangements.
24. Please disclose your accounting policy for recognition of revenue from contingent optimization consulting engagements disclosed on page two.

Loss Per Share, page 27

25. Please tell us what shares are subject to repurchase, the term of the related agreements and your basis in GAAP for excluding these shares from earnings per share computations. If shares subject to repurchase represent contingently returnable shares please advise in detail.

Note 3. Discontinued Operations, page 28

26. Please disclose the carrying amounts of the major classes of assets and liabilities included as part of assets and liabilities of discontinued operations. Refer to paragraph 47.a. of SFAS 144.

Note 6. Debt, page 29

27. Please tell us how you account for conversion options in convertible instruments that are the underlying for preferred stock purchase warrants. Please address the commitment date, measurement and recognition provisions of Issue 13 of EITF 00-27.

28. Please disclose the pertinent rights and privileges of the Series AA preferred stock, including dividend and liquidation preferences, participation rights, call prices and dates and other significant terms. Refer to SFAS 129.
29. Please tell us how you accounted for the October 31, 2007 waiver and amendment to the senior secured facility. In your response please address the provisions of EITF 96-19. Also tell us how you accounted for the new five-year warrant issued in connection with the waiver and amendment to the facility. In addition, please disclose the fair value of the warrant and your basis of valuation including assumptions.
30. Regarding the junior secured facility please tell us:
 - How to reconcile the face amount disclosed in the table on page 32 to the disclosures on page 30;
 - Your basis in GAAP for expensing the discount related to the beneficial conversion feature as disclosed on page 32 and/or why the discount does not agree to the beneficial conversion feature related to the junior secured facility disclosed in the consolidated statements of shareholders' equity;
 - How to reconcile the discount related to the warrants disclosed on page 32 to the amount disclosed in the consolidated statements of shareholders' equity and the discount amount disclosed in last paragraph of footnote nine on page 36;
 - How you determined the value of the beneficial conversion feature and warrants, including assumptions and why your accounting treatment complies with EITF 00-27;
 - The results of your evaluation of the classification of the beneficial conversion feature as a result of the June 15, 2007 amendment eliminating the conversion price floor and ceiling;
 - How you accounted for the June 15, 2007 modification and the basis in GAAP for your accounting treatment citing EITF 96-19 or other relevant literature; and
 - Why the sum of the fair value of the warrants and beneficial conversion feature disclosed in the table on page 32 exceeds the face value of the notes.
31. Please tell us how you accounted for the January 19, 2007 exchange of existing bridge loans for the issuance of new notes under the junior secured facility. Please discuss your consideration of warrants issued and changes in the fair value

of the conversion option. In your response please address the requirements of paragraph 16 of SFAS 140, EITF 96-19 and EITF 06-6.

32. It appears that the June 15, 2007 amendment to your junior secured facility eliminating the conversion price floor would require the reclassification of the embedded conversion options and other equity instruments within the scope of EITF 00-19 and SFAS 123(R). Please advise. Refer specifically to paragraphs 20 – 24 of EITF 00-19 and paragraphs 29 – 35 and A230 – A232 of SFAS 123R.
33. Please disclose the funding received and warrants issued pursuant to the June 15, 2007 amendment to the junior secured facility. Also disclose the fair value of the warrants issued pursuant to the June 15, 2007 amendment and the assumptions used in valuing the warrants.
34. Please tell us how the short-term notes issued in connection with the August 2007 bridge facility are classified in your consolidated balance sheets and in the debt table on page 31. Also, please disclose the discount related to the warrants and the assumptions used in valuing the warrants.
35. Please disclose the pertinent rights and privileges of the Series A preferred stock issuable upon exercise of the warrants issued in connection with the 20/20 bridge loan, including dividend and liquidation preferences, participation rights, call prices and dates and other significant terms. Refer to SFAS 129.
36. Please tell us how to reconcile the number of warrants issued in the 20/20 bridge loan and CentrePath bridge loan transactions to the amounts disclosed in the debt table on page 31. Also, please disclose the fair value of the warrants and the assumptions used in valuing the warrants issued in the 20/20 bridge loan, CentrePath bridge loan, GCG bridge loan and mandatory note transactions.
37. Regarding the registration rights agreements related to the warrants issued with the senior secured facility, junior secured facility and bridge loans, please provide the disclosures required by paragraph 12 of FSP EITF 00-19-2. In addition, tell us how you determined the amounts accrued, if any, as of December 31, 2007. Refer to paragraph 7 of FSP EITF 00-19-2.

Note 7. Warrants, page 33

38. Please disclose the number and weighted-average exercise prices of warrants outstanding at the beginning and end of the year and warrants issued, exercised or cancelled during the year and the number and weighted average exercise price of warrants exercisable at the end of the year.

Note 8. Stock-Based Compensation, page 34

39. Please disclose the weighted-average grant-date fair value of equity options granted for each year presented and the aggregate intrinsic value and weighted-average remaining contractual term of options currently exercisable. Refer to paragraph A240(c)(1) and A240 (d)(2) of SFAS 123(R).

Note 9. Shareholders' Equity, page 36

40. Please disclose if the warrants issued in connection with the equity funding transaction were modified due to delays in the registration of the shares of common stock underlying the warrants. Please tell us and disclose how you accounted for the modification, if applicable. In your response, please cite the authoritative literature that supports your accounting treatment.
41. Please disclose the fair value of the warrants issued to the placement agent of the unit offering and the assumptions used in valuing the warrants. In addition, it appears that the issuance of the warrants to the placement agent should be disclosed as a non-cash financing activity in your consolidated statements of cash flows. Please advise.
42. Please disclose the fair value of the warrants issued to consultants and directors and the assumptions used in valuing the warrants.

Note 10. Related Parties, page 37

43. Please disclose the dollar amounts of each transaction for each year presented. For example, please disclose the fair value of warrants issued to board members and other related parties and the amount of short-term bridge notes received and repaid for each related party. Refer to SFAS 57.
44. Please disclose whether you capitalized or expensed the advisory fees and related warrants issued to Aequitas and Capstone. Also, tell us your basis in GAAP for your accounting citing relevant authoritative literature.
45. Please tell us how you accounted for the transactions under the terms of the final severance and release agreement with your former CEO citing the accounting literature you applied. Also, revise your disclosure to clarify the effect of the agreement on your financial statements.

Note 14. Segment Reporting and Geographic Area Information, page 41

46. Reference is made to your disclosure of products and services on page two. Please disclose revenues for each product and service or each group of similar

products and services for each year presented unless it is impracticable to do so. If providing the information is impracticable, please disclose that fact and explain to us why disclosing the information is impracticable. Refer to paragraph 37 of SFAS 131.

Item 8A(T). Controls and Procedures, page 43

47. Please include an explicit statement whether or not internal control over financial reporting as of the end of the year is effective. Please note that you are precluded from concluding that your internal control over financial reporting is effective if there are one or more material weaknesses. Refer to paragraph (a)(3) of Item 308T of Regulation S-B and paragraphs 162 – 164 of PCAOB Auditing Standard No. 2.

Exhibits 31.1 and 31.2

48. Please revise to include the introductory language in paragraph 4 and paragraph 4(b) referring to internal control over financial reporting. Refer to of Item 601(b)(31) of Regulation S-B.

Form 10-QSB for Quarterly Period Ended March 31, 2008

49. Please address the comments above to the extent applicable.

Part I - Financial Information

Item 1. Financial Statements, page 3

50. Given the classification of warrants and embedded conversion options as liabilities, please tell us your consideration of classifying outstanding stock options as liabilities. Refer to paragraphs 29 – 35 and A230 – A231 of SFAS 123(R).

Consolidated Condensed Statements of Shareholders' Equity (Deficit), page 4

51. Reference is made to the beneficial conversion feature of the convertible Series AA preferred stock recognized during the year ended December 31, 2007. We note that you did not recognize the beneficial conversion feature of the convertible Series AA preferred stock issued during the quarter ended March 31, 2007. Please advise.
52. Please tell us the date(s) of the cashless exercise of warrants during the quarter ended March 31, 2008. If applicable, also tell us how you accounted for the warrant liability upon the exercise of the warrants and the basis in GAAP for your

accounting treatment citing the authoritative literature applied. Refer to EITF 00-19.

Consolidated Condensed Statements of Cash Flows, page 8

53. Please tell us the nature of non-cash issuances of common stock during the three months ended March 31, 2008. Also tell us how the transaction(s) are presented in the consolidated condensed statements of shareholders' equity (deficit).

Notes to Interim Consolidated Condensed Financial Statements, page 9
Note 4. Debt, page 13

54. Please tell us how you accounted for the extinguishment of the senior secured debt and remaining subordinated debt upon issuance of the debentures. In doing so, please discuss your consideration of the intrinsic value of the conversion options at the extinguishment dates. In your response please also address the requirements of paragraph 16 of SFAS 140, APB 26 and EITF 00-27 to the extent applicable.
55. Please disclose the fair value of the warrants issued to Capstone Investments and Aequitas Capital Management and the assumptions used in valuing the warrants.
56. You disclose in note six that the conversion features of the debentures are considered embedded derivatives. However, it does not appear that the discount related to the embedded conversion features is part of the unamortized discount disclosed in the table of debt on page 15. Please advise.

Note 5. Stock Warrants, page 16

57. Please tell us how you accounted for the October 2007 modifications of outstanding stock warrants citing the authoritative literature you applied. Also tell us why the warrant modifications are not disclosed in your financial statements for the year ended December 31, 2007 or otherwise advise. In addition, please disclose the effect of the modifications on your results of operations.

Note 8. Shareholders' Equity, page 18

58. Please tell us how you accounted for the modifications to the warrants disclosed in the last paragraph on page 18. In doing so, cite the authoritative literature you applied. In addition, please disclose the effect of the modifications on your results of operations.
59. Based on your disclosure in the last paragraph, it appears that certain stock options were exercised at ten-day trailing average market prices. Please tell us

how you accounted for these options and the basis in GAAP for your accounting treatment. In doing so, cite the authoritative literature you applied.

Item 2. Management's Discussion and Analysis, page 22

60. Please disclose the reasons for the change in depreciation and amortization and interest expenses between periods. Please refer to Item 303 of Regulation S-B.

Item 3(T). Controls and Procedures, page 24

61. Please revise your disclosure in the sixth full paragraph on page 25 to disclose changes in internal control over financial reporting that occurred during the quarter ended March 31, 2008 that has materially affected, or is reasonably likely to materially affect, your internal control over financial reporting. Refer to Item 308T(b) of Regulation S-B.

Exhibits 31.1 and 31.2

62. Please revise to include the introductory language in paragraph 4 and paragraph 4(b) referring to internal control over financial reporting. Refer to of Item 601(b)(31) of Regulation S-B.

As appropriate, please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our comments. Please submit your response letter on EDGAR.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;

Mr. Patrick C. Shutt
Capital Growth Systems, Inc.
May 23, 2008
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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

If you have any questions regarding these comments, please direct them to Adam Phippen, Staff Accountant, at (202) 551-3336. In his absence, please direct your questions to me at (202) 551-3344.

Sincerely,

William Thompson
Branch Chief