



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

Mail Stop 3720

October 10, 2007

Rian J. Wren
President and Chief Executive Officer
Neutral Tandem, Inc.
One South Wacker Drive
Suite 200
Chicago, IL 60606

Re: **Neutral Tandem, Inc.**
Registration Statement on Form S-1/A
Amended on October 4, 2007
File no. 333-140127

Dear Mr. Wren:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 30

Financial Operation Overview, page 31
Liquidity and Capital Resources, page 44

1. We note your revisions in response to our prior comment eight. However, please further revise to clarify your disclosure on page 32 that you expect to incur approximately \$2.3 million in network and facilities expenses in connection with your 12-month planned expansion. Why is the additional \$5.9 million of expected capital expenditures in connection with installation of switches disclosed on page 44 not included in your discussion of switch start-up costs on page 32?

Stock-Based Compensation, page 36

2. Please refer to your response to prior comment 9 in which you describe the significant factors contributing to the difference between your expected IPO range and the fair value of your stock as of June 30 and September 30, 2007. It is unclear to us how favorable trends that might have been known to you in previous quarters had more pronounced effects on your stock valuation in the third quarter, during which period, the fair value of your stock doubled compared to the fair values derived during the first and the second quarter. Your statement that "the Company continues to experience the same factors as those discussed in the previous quarter" indicates that no new significant developments have occurred and that the favorable trend that you experienced in the preceding quarters continues to be sustained. Please advise us. To facilitate our understanding of the change in your valuation and your assumptions, please provide us a schedule that illustrates how you calculated the fair value of your common stock over the twelve months separately identifying the values derived using the income approach and the market approach, the valuation resulting from the equal weighting, and the corresponding liquidity adjustments. For any significant change in any of the variables impacting the resultant fair value of your stock under either approach during the period, please describe the underlying circumstances and quantify the effects on the resultant values derived under the income or the market approach.
3. In particular, you state that the income approach was favorably impacted during the third quarter when, during the period, "the Company exceeded its projected operating results for the three months ended June 30, 2007) due largely to accelerated revenue growth in the Company's principal markets ... and operating margins exceeded forecasted results during this period..." Please provide a more detailed analysis that quantifies the effects of these factors on stock valuation using the income approach, highlighting the sequential period sales growth

between the second and the quarter of 2007 and a comparison of the second and third quarter operating income with their respective forecasts.

- In this regard, we note per your disclosure on page 38, your sequential period sales growth was 17.4% in the first quarter of 2007 and 16.5% in the second quarter 2007 along with ... continued growth in operating income from \$2.4 million in the second quarter 2006 to \$4.1 million in the second quarter 2007.” Notwithstanding, the fair value of your stock only marginally increased from \$4.09 as of the first quarter of 2007 to \$4.14 as of the second quarter 2007. Please provide us with a more detailed analysis of the sequential period sales growth and quarter-over-quarter growth in operating income during the third quarter of 2007, quantifying the effects of such factors in your valuation model that resulted in the doubling of the fair value of your stock between the second and the third quarter of 2007. It is unclear to us how trends that might have been known to you during the previous quarters had more pronounced effects on your valuation during the third quarter.
 - Please tell us how the increased leverage of your fixed operating costs in many of your principal operating markets at levels above the Company’s initial expectations produced a greater impact on your stock valuation during the third quarter of 2007 as compared to the preceding quarters. Please provide us a more detailed sequential quarter and year-over-year quarterly analysis compared to initial expectations that supports your statement.
 - Please quantify the effect of the change in the risk adjustment, if any, which was applied to your previous valuation as a result of the Level 3 legal proceedings. We note that the decisions of the Georgia and New York Public Service Commissions were issued in June 2007.
4. Please provide us a schedule depicting the increase in the trading multiples of comparable companies during the third quarter and how you used this information to adjust your stock valuation under the market approach.
5. To clarify your concluding statements, please tell us the following:
- Why it would be appropriate to utilize an illiquidity adjustment factor of 20% and 15% within twelve months and six months of an IPO, respectively.
 - Addressing the conversion terms of the preferred stock series, what you mean by your statement that “on a publicly traded basis (represented by the IPO range), removing any previously applicable discount of 15% and

viewing the Company's preferred stock as a common stock equivalent results in an average fair value that would be within the IPO range."

Compensation Discussion and Analysis, page 71

Elements of Compensation, page 72

6. We note your disclosure of your corporate targets for the 2006 fiscal year. However, you also discuss quantitative individual objectives in connection with the annual cash incentive bonus program. Please revise to disclose such objectives for 2006. Further, clarify on page 83 whether these individual objectives were considered in connection with the stock option grants made in the second half of 2006 and, if so, describe how they were considered. Currently, your disclosure on page 74 under "Long Term Incentive Plan Awards" indicates that periodic stock options grants are based upon the achievement of the individual targets, but the disclosure on page 83 only addresses the achievement of the corporate targets.
7. So that investors will have a better understanding of how difficult it will be to achieve the stretch goals in 2007, please disclose the percentage by which the stretch goals exceed your corporate targets.
8. We reissue our prior comment 14. Although we note from your disclosure on page 83 that options were awarded in 2006 based upon projected achievement of corporate targets, it is unclear how this determination resulted in differing option grant amounts to your named executive officers. We note your general disclosure of differences in compensation on page 76, but believe more detail is necessary to explain your 2006 option grants. In addition, disclose whether the Compensation Committee will utilize the same standard, i.e., "on a path to substantially meet the internal business plan," to determine whether you "may or may not make such mid-year stock option grants" in the future.

Annual Cash Incentive Bonus, page 73

9. Please refer to your statement that based on your "... results to date and assuming similar results for the remainder of the year, we anticipate that the corporate target's portion of the incentive bonus and stretch bonus will be attained in 2007." Tell us if the financial statements reflect an accrual for the prorated incentive bonuses earned to date. If not, tell us why.

Note 3. Restatement of Consolidated Financial Statements, page F-12

10. We note your response to prior comment 17. Please tell us why the 2004 consolidated statements of operations and cash flows were not restated for the revised accounting for the warrants to purchase convertible preferred stock.

Mr. Ronald W. Gavillet
Neutral Tandem, Inc.
October 10, 2007
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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Kathryn Jacobson, Staff Accountant, at (202) 551-3365 or Dean Suehiro, Senior Staff Accountant, at (202) 551-3810 if you have questions regarding comments on the financial statements and related matters. Please contact John Harrington, Attorney-Adviser, at (202) 551-3576, or me at (202) 551-3810 with any other questions.

Sincerely,

/s/ Michele Anderson
Legal Branch Chief

cc: Gerald T. Nowak
Andrew J. Terry
Theodore A. Peto
Kirkland & Ellis LLP
Via facsimile: (312) 861-2200