

June 4, 2010

VIA EDGAR AND OVERNIGHT DELIVERY

Securities and Exchange Commission
100 F. Street, N.E.
Washington, D.C. 20549-3628

Attention: James E. O'Connor, Esq.
Division of Investment Management

Re: Horizon Technology Finance Corporation
Registration Statement on Form N-2, Filed March 19, 2010
File Nos. 333-165570 and 814-00802

Dear Mr. O'Connor:

On behalf of Horizon Technology Finance Corporation, a Delaware corporation (the "Fund"), we are responding to the comments of the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") set forth in your letter dated May 28, 2010, and as communicated to us by telephone by Ms. Christina DeAngelo on May 28, 2010, with respect to the above-referenced registration statement on Form N-2, filed by the Fund on March 19, 2010 (the "Registration Statement"), in connection with the proposed offer by the Fund of its common stock, \$0.001 per share par value (the "Shares").

In connection with this response the Fund is today also filing with the Commission Amendment No. 1 to the Registration Statement (the "Amendment") which reflects the responses set forth below, as appropriate. We are also sending you via overnight delivery three (3) courtesy copies of the Amendment.

To facilitate the Staff's review, this letter includes each of the Staff's comments in italics followed by a response to the staff's comments. Capitalized terms used in the Amendment and used in the following responses without definition have the meanings specified in the Amendment, or the Staff's comment letter, as the context requires. All references to page numbers in the responses to the Staff's comments are to page numbers in the Amendment.

Prospectus

Cover Pages

1. *The disclosure on the front cover states that the Fund “intends to file an election to be regulated as a business development company. We suggest that this election be made, by filing Form N-54A, before the Fund’s registration is declared effective.*

As suggested by the Staff, the Fund intends to file an election to be regulated as a business development company on Form N-54A before the Registration Statement is declared effective by the Commission.

2. *Please disclose in the third paragraph on the front cover that none of the proceeds of the “CHP” shares being registered for resale will go to the Fund.*

Disclosure has been added in the third paragraph on the front cover of the prospectus that none of the proceeds of the “CHP” shares being registered for resale will go to the Fund.

3. *Please make prominent the statement in the third paragraph that “this is our initial public offering, and there is no prior public market for our shares.” See Item 1.1.i. of Form N-2. Please also move the last sentence of the sixth paragraph to follow this sentence and disclose the amount of immediate dilution in net asset value per share that purchasers in the current offering will suffer, based on the initial offering price per share. In addition, please provide page citations to the dilution discussions, on pages 35 and 47, of the prospectus.*

In response to the Staff’s comment, the Fund has made prominent the referenced statement by including it in the bolded large-type paragraph on the front cover that discusses risk and dilution. In addition, the noted disclosure regarding dilution has been added in the bolded paragraph, including cross-references to the dilution discussions on pages 34 and 48 of the Amendment.

4. *Also in the bolded paragraph, please revise the statement that “investing in our common stock involves risks...” to state that investments made in the Fund should be considered “highly speculative” and “involving a high degree of risk.” See Item 1.1.j. of Form N-2.*

The requested revision to the bolded large-type paragraph on the front cover that discusses risk and dilution has been added.

5. *In the bolded paragraph, please delete the phrase “which are structured similarly to us” and substitute “including business development companies.”*

The requested deletion and substitution in the bolded paragraph has been made.

6. *Please add a statement to the paragraph immediately preceding the “Table of Contents” that the prospectus will be amended to reflect material changes.*

A statement that the prospectus will be amended to reflect material changes has been added to the paragraph immediately preceding the "Table of Contents."

7. *Please add the statement required by Rule 481(e) under the 1933 Act.*

The statement required by Rule 481(e) was already included on the back cover page of the prospectus.

8. *The Fund does not appear to have a minimum offering requirement. If not, please disclose the risk that the Fund may be undercapitalized.*

In response to the Staff's comment, the Fund has added disclosure on the inside front cover of the prospectus contained in the Amendment to state that because the Fund does not have a minimum offering requirement, there is a risk that the Fund may be undercapitalized.

9. *Please explain in your response letter how the Fund will account for the offering expenses and sales load.*

We have been advised that offering expenses and the sales load will be recorded as an off-set to the stockholders' capital account.

10. *Where will the over-allotment shares come from?*

As indicated on the cover page and elsewhere in the prospectus, all of the over-allotment shares will come from the Fund.

11. *Please disclose any "other consideration" paid to the underwriters. See Instruction 2. to Item 1.1.g. of Form N-2.*

Neither the Fund nor the Selling Shareholders will pay any "other consideration" within the meaning of Instruction 2. to Item 1.1.g. of Form N-2.

Prospectus Summary

1. *In all of the Summary subsections, please include citations, including page numbers, where there are more detailed discussions in the body of the prospectus.*

Cross references, including page numbers, to more detailed discussions in the body of the prospectus have been added throughout the Summary subsections.

2. *The subsection "Our Company" describes the "existing portfolio" as being invested only in loans and warrants. The disclosure about specific investments on pages 73-75, however, appears to indicate*

that the existing portfolio includes substantial investments in preferred shares. Please clarify the disclosure.

The disclosure on pages 76 through 78 of the Amendment indicates that the investments include warrants to purchase either common stock or preferred stock. Disclosure has been added to pages 1 and 2 of the Amendment under the subsection "Our Company" clarifying that the existing portfolio includes warrants to purchase either common stock or preferred stock. There have been no investments to date in any preferred stock.

3. Please disclose, in the same subsection, that the loans in which the Fund invests will generally not be rated by any rating agency. If they were rated, they would be rated as below investment grade or "junk." Indebtedness of below investment grade quality is regarded as having predominantly speculative characteristics with respect to the issuer's capacity to pay interest and repay principal.

Disclosure has been added under the subsection "Our Company" to reflect that the loans in which the Fund invests will generally not be rated by any rating agency.

4. Please move the subsection, "Historical Performance of Our Advisor," on page 3, to anywhere after the financial highlights table. In addition, please inform us what authority permits you to present the Advisor's prior performance and how your presentation is consistent with that authority.

In response to the Staff's comment, the disclosure regarding the Advisor's historical performance has been moved to pages 87 and 88 of the Amendment. The Fund believes that the information regarding the historical performance of the Advisor as depicted in the Amendment (and with the benefit of the Staff's comments herein) is important to investors making a decision as to whether or not to purchase the shares being offered. Accordingly, that information is material and should be disclosed. Moreover, disclosure of this information is not inconsistent with the general requirements of Parts A and B of Form N-2 concerning historical information regarding portfolio managers. We are not aware of other authority that prohibits the Fund to present the Advisor's prior performance history.

5. Please clarify the meaning of the phrases "fund raising history" and "investment mandate similar to ours." Does the latter mean that there are no material differences in the objectives, policies and investment strategies?

The Fund has deleted the phrase "fund raising history." In addition, disclosure has been added on page 3 of the Amendment in the subsection "Historical Performance of Our Advisor" to clarify that there are no material differences in the objectives, policies and investment strategies of the Fund and the other funds historically managed by the Advisor.

6. Please delete the three sentences that follow the phrase "investment mandate similar to ours." ("In addition to the performance shown below...could also decrease the IRR of each fund presented below.") They are irrelevant to a presentation of prior performance. Likewise, please delete the last paragraph of this subsection. It does not describe the historical performance of the advisor.

The requested deletions have been made and the deleted information has been moved to the subsection "Our Advisor and Its Personnel" on pages 2 and 3 of the Amendment.

7. *Any prior performance presentation that is presented may only be calculated using the SEC-mandated average annual total return formula for the 1-, 5-, and 10-year periods ended on the date of the most recent balance sheet included in the registration statement (or for the periods the funds have been in operation). Please delete all references to "IRR."*

In response to the Staff's comment, the Fund has revised the prior performance presentation on pages 87 and 88 of the Amendment to disclose the SEC-mandated average annual total return formula for the 1- and 5-year periods ended on the date of the most recent balance sheet included in the Registration Statement and the periods since inception of the funds have been in operation. All references to IRR have been deleted.

8. *The subsection "Our Strategy," on page 3, states that the Fund's investment objective is to "maximize our investment portfolio's total return by generating current income from the loans we make." The cover page states that the Fund's investment objective is to "generate current income from the loans we make." Please conform the disclosure.*

The Fund has conformed the disclosure consistent with the Staff's comment.

9. *The paragraph "Disciplined Underwriting, Diversification and Portfolio Management," on page 4 states that the Fund seeks to "diversify" its investment portfolio. Because the Fund is non-diversified, please use another term.*

The Fund has revised the disclosure on pages 3 and 63 of the Amendment to use the term "balanced" instead of the term "diversify."

10. *With respect to the paragraph "Use of Leverage; SBA Debenture Program," on page 5, what is the current status of the Fund's application for an SBIC license and its related application for exemptive relief from the SEC.*

Following the receipt by the Advisor of the "Move Forward Letter" noted in the Registration Statement, there have been no material developments in the SBIC licensing process. The Fund and the Advisor expect to continue the pursuit of the SBIC license and to seek companion exemptive relief from the Commission soon after the completion of the offering.

11. *In the "Investment Summary" subsection, on page 8, please clarify the following issues.*

Are all of the listed investments assets of "Compass Horizon Funding Company LLC" and will they all become assets of the Fund?

All of the listed investment assets, other than loans that have been fully repaid, are currently assets of Compass Horizon Funding Company LLC and/or its wholly-owned subsidiary, Horizon Credit I LLC.

All of these current assets will become assets of the Fund upon completion of the Share Exchange. The Fund has clarified the disclosure on page 76 of the Amendment in response to the Staff's comment.

Are all of the loans currently performing and not impaired?

All of the loans are currently performing and unimpaired. The Fund has clarified the disclosure on page 76 of the Amendment in response to the Staff's comment.

12. With respect to the "Distribution and Share Exchange," discussed on pages 9 and 39, please clarify the following issues:

What is the meaning of "prior to the completion of this offering"?

The Share Exchange will occur prior to the time the Form N-54A is filed and the Form N-2 is declared effective.

Will the "Share Exchange" be completed and all of the Fund shares to be issued to the owners of Compass Horizon be "in their hands" before the effectiveness of the registration statement?

The Share Exchange will be completed and all of the Shares to be issued to the owners of Compass Horizon will be "in their hands" before the Registration Statement is declared effective.

Is the closing of the private placement contingent upon the closing of the IPO?

The Share Exchange will be completed before the closing of the IPO and is not conditioned upon the closing of the IPO.

Will anyone, other than the current owners of Compass Horizon, be issued shares of the Fund before the effectiveness of the registration statement?

No one, other than the current owners of Compass Horizon, will be issued shares of the Fund before the effectiveness of the Registration Statement.

Will any of the current owners of Compass Horizon be issued additional Fund shares in exchange for cash, property, by means of a financing transaction before the effectiveness of the registration statement?

Other than the shares issued in the Share Exchange, the current owners of Compass Horizon will not be issued additional Fund shares in exchange for cash or property or by means of a financing transaction before the effectiveness of the Registration Statement.

Will Compass borrow to make the cash distribution to CHP?

Compass Horizon will not borrow funds to make the cash distribution to CHP.

What is meant by “other loan income”?

Although the reference to other loan income has been deleted from the description of the “Distribution and Share Exchange,” other loan income means various fees on loans which generally consist of advisory fees, commitment fees, amendment fees, non-utilization fees and prepayment fees and, in a limited number of cases, a non-refundable deposit earned upon the termination of a transaction.

Will the Share Exchange rely on Section 4(2) of the 1933 Act, through the Rule 506 safe harbor of Regulation D?

The issuance of Fund shares in the Share Exchange will be made in reliance on the exemption provided by Rule 4(2) of the 1933 Act and Rule 506 of Regulation D thereunder.

Will all of the restricted shares of the Fund be issued to accredited investors?

All of the restricted shares of the Fund will be issued to accredited investors.

Are the selling shareholders described as parties to the underwriting in the underwriting agreement?

The selling stockholder is described as a party to the underwriting in the underwriting agreement.

Will the selling shareholders be participating in the Share Exchange “with a view to” reselling their shares in the IPO, such that they may be deemed to be “underwriters,” as defined in Section 2(a)(11) of the 1933 Act? Please provide an analysis.

Except for the shares being sold by the selling stockholder in the offering which are included in the Registration Statement, neither the selling stockholder nor any of the other Compass Horizon Owners participating in the Share Exchange will be doing so with a view to reselling their shares in the IPO. Since the shares being sold in the IPO by the selling stockholder are being registered, the selling stockholder is not relying upon the exemption provided by Section 4(1) of the 1933 Act and, accordingly, it is not necessary to determine whether the selling stockholder or any other Compass Horizon Owner is an underwriter as defined in Section 2(a)(11) of the 1933 Act.

13. Please provide us with copies of the registration rights agreements between the Fund and the selling shareholders and a copy of the Fund’s private placement memorandum.

The Fund has described the terms of the registration rights agreement among the selling stockholder, HTF-CHF and the Fund that the Fund intends to execute with the selling stockholder and HTF-CHF in conjunction with the Share Exchange on page 106 and will file a copy of the agreement by amendment. The Fund does not intend to use a private placement memorandum in connection with the Share Exchange.

14. In the “Risk Factors” subsections, on pages 9, 22, and elsewhere in the registration statement, please make clear that, not only does the Advisor have no experience managing a business development company, but it also has no experience managing an investment company.

In the risk factor subsections on pages 8 and 16, disclosure has been added to make it clear that not only does the Advisor have no experience in managing a business development company, it also has no experience in managing an investment company.

15. In the same subsection, please explain what is meant by the statement: "we may allocate the net proceeds from this offering in ways with which you may not agree."

As disclosed on pages 10, 33 and 45 of the Amendment, the Fund intends to use the net proceeds of the offering for new investments in portfolio companies in accordance with the Fund's investment objectives and strategies described in the prospectus, for general working capital purposes and for temporary repayment of debt. It is possible that every investor may not agree with the Fund's allocation of the net proceeds of the offering or the amount of proceeds allocated for such purposes. In particular, investors may not agree with particular investments purchased using such proceeds.

The Offering, page 11

1. Please fill in the blanks with respect to the amounts of shares being offered on pages 11 and 14.

The blanks with respect to the amounts of shares being offered will be filled in on pages 10 and 13 by amendment before the Registration Statement is declared effective by the Commission.

2. The table at the top of page 11 appears to indicate that the "selling stockholder" will be selling in the offering. Likewise, the disclosure on page 14 states: "...the number of shares of our common stock to be outstanding immediately following the completion of this offering is based on the number of shares outstanding as of ___, 2010 and assumes the sale of ___ shares of our common stock by the selling stockholder..." The disclosure on pages 34 and 102, however, indicates that the shares issued to the "selling shareholder" will be subject to a 180-day contractual lock-up. Please explain this apparent discrepancy or revise the disclosure.

The disclosures on pages 32 and 106 reflect what will be the case upon consummation of the offering. Those disclosures are consistent with the fact that the selling stockholder will be selling shares in the offering. Only the shares owned by the selling stockholder that are not included in the offering will be subject to the lock-up.

3. Is the selling stockholder an "affiliate" subject to the volume limitations and manner-of-sale requirements of Rule 144 under the 1933 Act disclose the amount of immediate dilution in net asset value per share that purchasers in the current offering will suffer, based on the initial offering price per share. In addition, please provide page citations to the dilution discussions, on pages 35 and 47, of the prospectus.

Whether or not the selling stockholder will be an "affiliate" subject to the volume limitations and manner-of-sale requirements or Rule 144 will depend upon the facts and circumstances at the time of any sale made by the selling stockholder in reliance upon Rule 144. Rule 144 defines an "affiliate" of an

issuer to mean a person that directly, or indirectly, controls, or is controlled by, or is under common control with, such issuer. It is not possible to determine whether the selling stockholder will be an affiliate at the time it chooses to make a sale of its common stock in reliance upon Rule 144. It is not necessary for the selling stockholder to rely upon the relief provided by Rule 144 in connection with the offering, because the shares being offered by the selling stockholder will be registered under the 1933 Act. Following the completion of the offering, the Compass Horizon owners may be considered "affiliates" of the Fund and, if so, would be subject to the volume limitations and manner of sale requirements of Rule 144.

The Fund will disclose the amount of immediate dilution in net asset value per share that purchasers in the current offering will suffer based upon the initial offering price per share by amendment as soon as a mid-point of the offering price range is established in conjunction with discussions with the underwriters.

The Fund has added a new subsection to the "Offering" section called "Dilution" in which the Fund highlights the amount of immediate dilution in net asset value per share that purchasers in the current offering will suffer based upon the initial offering price per share and have provided citations to the dilution discussions elsewhere in the prospectus.

4. The disclosure on page 11 states that the proceeds of the offering may be used "for temporary repayment of debt." Please explain this statement.

The portion of the net proceeds of the offering used for temporary repayment of debt will be used to pay down the Fund's existing Credit Facility. Since funds may be reborrowed under the Credit Facility, it is expected that the repayment of the Credit Facility may be temporary. The Fund has clarified the disclosure on pages 10 and 45 of the Amendment in response to the Staff's comment.

5. It appears from the disclosure that the Investment Management Agreement and the Administration Agreement may cover some of the same expenses. Please explain or revise the disclosure.

The Fund advises the Staff that it has revised the disclosure in the summary section to clarify that the expense reimbursement amounts will be payable pursuant to the Administration Agreement. There will be no duplication in the expenses that are covered under the Administration Agreement and the Investment Management Agreement. Conforming changes throughout the Amendment have also been made.

Fees and Expenses, page 15

1. Please relocate the fee table so that it immediately follows the prospectus summary.

The Fund respectfully advises the Staff that the location of the Fees and Expenses table on page 14 of the Amendment is appropriate and complies with General Instruction 1 to Form N-2, which requires the Fees and Expenses table to follow the information provided pursuant to Items 1 and 2 of Form N-2.

2. *Please provide the missing fee table information.*

All missing fee table information is now provided.

3. *Please confirm that the amount of offering proceeds used in the calculation of net assets is the amount most likely to be raised in the offering.*

The Fund's calculation of net assets will be based on its total assets and net assets on a pro forma basis after giving effect to the offering that will be discussed in a subsequent amendment to the Registration Statement. While the Fund is currently unable to determine the actual amount of proceeds most likely to be raised in the offering, the Fund believes the use of the pro forma amounts is reasonable.

4. *In the line item "Estimated Annual Expenses (as a Percentage of Net Assets Attributable to Common Stock)," please delete the word "estimated."*

The Fund has revised the disclosure on page 14 of the Amendment consistent with the Staff's comment.

5. *In the line item "Base Management Fees," please delete the word "base" and make "fees" singular.*

The Fund has revised the disclosure on page 14 of the Amendment consistent with the Staff's comment.

6. *Please provide an "Acquired Fund Fees and Expenses" line item if any of the Fund's assets will be invested in an "acquired fund," including a money market fund. See Instruction 10 to Item 3.1. of Form N-2.*

None of the Fund's assets on the date of the closing of the offering will be invested in an "acquired fund." Accordingly, the inclusion of an "Acquired Fund Fees and Expenses" line item is not required by Form N-2.

7. *Please expand footnote "4" to indicate that the term "gross assets" includes those acquired using leverage.*

Footnote 4 on page 14 of the Amendment has been expanded to disclose that the term "gross assets" includes those assets acquired using the proceeds of leverage.

8. *At the end of the line item "Other Expenses," please add the phrase "(estimated for the current fiscal year)."*

The Fund has revised the disclosure on page 14 of the Amendment consistent with the Staff's comment.

9. *Please move the examples of the calculation of the incentive fees from page 85 to immediately follow the Example.*

The Fund notes the Staff's comment and respectfully advises the Staff that it does not believe that moving the examples of the calculation of the incentive fees is required by Form N-2. In addition, the Fund believes that moving the examples will make the Fees and Expenses section unduly lengthy and difficult for an investor to understand without the more fulsome disclosure regarding the fees payable under the Investment Management Agreement beginning on page 16 of the Amendment. The Fund has revised the disclosure on page 15 of the Amendment to add a cross-reference to the fee calculation examples beginning on page 89 of the Amendment.

10. *In the fee table and throughout the registration statement, please provide financial information as of a date that is more recent than December 31, 2009.*

In the fee table and throughout the Registration Statement, financial information as of March 31, 2010 has been provided.

11. *Does the Fund intend to issue preferred shares within a year of the effective date of the registration statement?*

The Fund does not currently intend to issue preferred shares within one year of the effective date of the Registration Statement.

12. *Please delete the phrase, "our only debt outstanding is \$64.2 million under our Credit Facility and" from the narrative to the "Example."*

The Fund has revised the disclosure on page 15 of the Amendment consistent with the Staff's comment.

Risk Factors, page 17

1. *The disclosure, on page 19, states that "in lieu of a security interest in the intellectual property we may sometimes only obtain a commitment by the portfolio company not to grant liens to any other creditor on the company's intellectual property. In these cases, we may have additional difficulty recovering our principal in the event of a foreclosure." This statement contradicts the investment strategy described on the cover of, and elsewhere in, the prospectus that the Fund makes only secured loans. Please explain this discrepancy or revise the disclosure.*

Although the Fund will make only secured loans, consistent with its investment strategy, in some cases these loans may be secured by all of the borrower's assets other than intellectual property. We have revised the disclosure on page 29 to clarify the disclosure.

2. *Please make the subsection "Risks Related to our Business and Structure" the first one in the Risk section.*

The risks under the subsection “Risks Related to our Business and Structure have been moved to the beginning of the “Risk Factor” section of the prospectus beginning on page 16 of the Amendment.

3. *With respect to the disclosure on page 24, please address the following issues.*

What is “Horizon Credit I LLC” and why is it a party to the Credit Facility with WestLB AG? Is Horizon Credit I a financing subsidiary of the Fund set up to hold Fund assets that serve as collateral for loans made under the credit facility?

Horizon Credit I LLC is a party to the Credit Facility to satisfy the lender’s requirement that the collateral for the loans made under the Credit Facility be held by a bankruptcy remote subsidiary as borrower under the Credit Facility.

Will such assets remain consolidated on the Fund’s balance sheet and count for the Fund’s asset coverage requirements under the Investment Company Act of 1940 (“1940 Act”)?

Yes. Such assets will remain consolidated on the Fund’s balance sheet and count for the Fund’s asset coverage requirements under the 1940 Act.

Please identify the “certain of our subsidiaries” referred to throughout this subsection. Why are they also parties to the Credit Facility arrangement? Why are they required to “comply with various financial covenants”?

The risk factor on page 18 of the Amendment regarding the Credit Facility has been revised to delete the references to “certain of our subsidiaries” and disclose that the Fund’s only subsidiaries are Compass Horizon Funding Company LLC and Horizon Credit I LLC. Compass Horizon Funding Company LLC and Horizon Credit I LLC are required to comply with the various financial covenants because they are parties to the Credit Facility.

Please define the term “certain change of control events.”

We have modified the disclosure on page 18 of the Amendment to clarify that a “change of control” means a merger or other consolidation, a liquidation or bankruptcy, a sale of all or substantially all of the assets of the Fund, or a transaction (or series of transactions) in which another person or entity acquires 50% or more of our shares.

Please explain what is meant by a “breach of certain of the covenants or restrictions would result in a default under the Credit Facility that would permit the lender to declare all amounts outstanding to be due and payable.” In the event of a default, would the lender have contractual rights to seize Horizon Credit I assets without adjudication?

We have modified the disclosure on page 19 of the Amendment to clarify that an event of default under the Credit Facility would permit the lender to exercise all rights available under Credit Facility and

the security interest granted in the assets of Credit I, including, to the extent permissible under applicable law, the seizure of such assets without adjudication.

Please explain the statement: “an event of default or an acceleration under the Credit Facility could also cause a cross-default or cross-acceleration of another debt instrument or contractual obligation.”

The statement cited means that an event of default under the Credit Facility could also result in an event of default under another debt instrument or contractual obligation of the Fund. Similarly, if the lenders under the Credit Facility accelerate the loan thereunder, the lenders under another debt instrument or contractual obligation could also be permitted to accelerate any obligations thereunder. Currently, however, there is no other debt instrument or contractual obligation to which the Fund or either of its subsidiaries is a party.

Please furnish us with copies of the Credit and Security Agreement.

In response to the Staff’s comment, the Credit and Security Agreement has been filed as an exhibit to the Registration Statement and any amendments thereto will be filed as exhibits to a subsequent amendment to the Registration Statement.

4. On page 27, the disclosure states that the board of directors “will value these investments on a quarterly basis in accordance with our valuation policy consistent with generally accepted accounting principles.” Please revise this to state that the board will determine fair value quarterly, or more frequently, as circumstances require. Please explain what is meant by “consistent with generally accepted accounting principles.” Is the valuation policy written and has it been formally adopted by the board.

We have revised the disclosure on page 21 of the Amendment to clarify that the board will determine fair value more frequently than quarterly as circumstances require. In addition, we have expanded the disclosure concerning valuation policies to reference both GAAP and the 1940 Act. Finally, the Fund confirms that the valuation policy is written and will be presented to the board of the Fund for approval prior to the Fund’s election to be regulated as a business development company upon the filing of its Form N-54A.

5. The same subsection states that “our board of directors will employ an independent third-party valuation firm to assist the board in arriving at the fair value of our investments.” The section “Determination of Net Asset Value,” on page 94, states, however, that a third-party valuation firm will be engaged by the board only to conduct “selected investment independent appraisals” for “investments for which market quotations are not readily available or for which no indicative prices from pricing services or brokers or dealers.” If it is not the Fund’s policy to engage an independent third-party valuation firm for every such investment, this represents a significant risk that should be prominently disclosed.

The disclosure in the same subsection has been revised to reflect that an independent third-party valuation firm will be engaged by the board to conduct, at least annually, a valuation of each investment.

6. *Page 29 indicates that the Fund may make investments in original issue discount instruments. Page 31 indicates that Advisor will have an incentive to invest in instruments that have a “deferred interest feature.” What percentage of the Fund’s income is anticipated to be OID? Is there a limit on the OID investments that the Fund can make? If the Fund’s OID investments will be significant, please provide summary risk disclosure about the fact that such investments will require the Fund to pay incentive fees and taxes on accrued income that will not be collectible until maturity of the instrument and, ultimately, may not be collected.*

We have revised the disclosure on page 25 of the Amendment to reflect that for the fiscal years ended December 31, 2008 and December 31, 2009 and the quarterly period ended March 31, 2010, respectively, Compass Horizon derived 1.60%, 3.42% and 4.54%, respectively, of its income from the deferred interest component of its loans. The disclosure has also been revised to state that the governing documents of the Fund do not place a limit on the number of loans the Fund may make with deferred interest features or on the proportion of the Fund’s income derived from such loans as OID.

In addition, we have revised the disclosure on page 23 of the Amendment to reflect that total OID as a proportion of Compass Horizon’s income for the fiscal years ended December 31, 2008 and December 31, 2009 and the quarterly period ended March 31, 2010 was approximately 4.34%, 8.24% and 7.66%, respectively.

7. *With respect to the conflicts of interest disclosure on page 30, does the Advisor have a written policy for handling conflicts of interest?*

The Advisor will have a written policy for handling conflicts of interest prior to the completion of the offering, which policy will be approved by the Fund’s board of directors prior to retaining the services of the Advisor.

8. *In the same conflict of interest disclosure on page 30, raises the issue of whether the Fund may be making co-investments that require exemptive relief under Section 17(d) of the 1940 Act. Please provide us with more information about the joint transactions referred to in this subsection. Please inform us whether the board of directors will approve every co-investment made the Fund.*

The Fund respectfully advises the Staff that the Fund does not presently intend to make co-investments that would require exemptive relief under Section 17(d) of the 1940 Act. The disclosure on page 25 of the Amendment is intended to advise investors that, in certain cases, investment opportunities may be allocated to other entities affiliated with or arranged by the Fund’s Advisor. In the event that the Fund were to elect in the future to make co-investments with other affiliated entities that neither exist today nor are contemplated to exist, these co-investments would be approved by the board of directors and would be preceded by a request for exemptive relief under the 1940 Act from the Commission if needed. We have modified the disclosure on page 24 to remove a portion of the penultimate sentence of the referenced paragraph, which portion implied that co-investments are contemplated.

9. *On page 31, please state how much advance notice the Fund will give shareholders if it changes investment objective or policies.*

The Fund respectfully advises the Staff that no advance notice will generally be given to stockholders with respect to changes in the Fund's investment objectives or policies as disclosed on page 25 of the Amendment. The Fund has, however, modified the disclosure on pages 25 and 108 of the Amendment to reflect the fact that the Fund may not change the nature of its business so as to cease to be, or withdraw its election, as a business development company without stockholder approval as required by the 1940 Act at a special meeting as called upon written notice of not less than 10 nor more than 60 days before the date of such meeting.

10. The disclosure on pages 32-33 may create an impression that compliance with "Sarbanes-Oxley" creates risks for the Fund. In fact, such compliance may reveal risks that can then be eliminated by the Fund. Please clarify this point.

The risk factor regarding Section 404 of the Sarbanes-Oxley Act has been deleted.

11. Please revise the subsection heading on page 34, as follows: "Subsequent sales in the public market of substantial amounts of our common stock issued to insiders may have an adverse effect on the market price of our common stock."

The requested revisions to the risk factor heading on page 32 of the Amendment regarding the potential effect of subsequent sales of the Fund's common stock have been made.

12. In the same subsection, please disclose the following information.

What is the number of Fund shares to be issued to officers, directors and existing stockholders?

Disclosure regarding the number of Fund shares to be issued to officers, directors and existing stockholders will be added to the risk factor on page 32 by amendment.

The disclosure says that all of the shares issued to the officers, directors and existing stockholders are subject to contractual "lock-ups," but the Selling Shareholder's shares included in the current resale registration are obviously not. Please clarify the disclosure.

The disclosure indicates that "upon consummation of this offering" officers, directors and existing stockholders will be subject to contractual "lock-ups" with the underwriters. The shares being sold by the selling stockholders in the offering will no longer be owned by the selling stockholder upon consummation of the offering. As a result, these shares will not be subject any contractual lock-ups but any shares that the selling stockholder continues to own will be so subject. The Fund has revised the disclosure on page 32 of the Amendment in response to the Staff's comment.

What portion of the shares issued to the Selling Shareholder is included in the resale registration?

The Fund anticipates that approximately 54% of the shares issued to the selling stockholder in the Share Exchange will be included in the offering.

What is the expected ratio of the number of restricted Fund shares subject to lock-up compared to the number of publicly issued following completion of the offering?

The Fund respectfully advises the Staff that the expected ratio of the number of restricted Fund shares subject to the lock-up compared to the number of publicly issued shares outstanding upon completion of the offering is currently expected to be approximately 1-to-6 (or approximately 15% to 20%).

If the "overhang" is significant, please disclose prominently that the Fund's share price may be negatively impacted by insider sales following the expiration of the lock-up.

The overhang is not expected to be significant.

What percentage of the restricted shares is expected to be sold following the end of the lock-up period.

The Fund has no information as to whether any of the holders of the restricted shares intend to sell such shares following the end of the lock-up period.

Will the Fund pay the costs of the resale registrations of the Rule 144 stock of its officers, directors and existing stockholders?

The Fund intends to execute a registration rights agreement with the selling stockholder and HTF-CHF in conjunction with the Share Exchange and, as a result, will be obligated to register the resale of any shares subject to such agreement and pay the customary costs and expenses of such registration. The Fund has not granted, nor does it intend to grant, any other registration rights to its officers, directors or existing stockholders. Accordingly, other than with respect to the registration rights agreement mentioned above, the Fund will have no obligation either to register the resale of any shares held by its officers, directors or existing stockholders or to pay the costs of such registration.

Will the board make a good faith determination with respect to the payment by the Fund of the expenses of the current and future resale registrations?

The board will make a good faith determination with respect to the payment by the Fund of the expenses of the current resale registration. Additionally, when the board considers the approval of the anticipated registration rights agreement with the selling stockholder and HTF-CHF, it will make a good faith determination with respect to the payment by the Fund of the expenses of future resale registrations.

13. In the subsection describing the risks of "immediate dilution," on page 35, please clarify why the price discussion of the Fund's stock issued to the owners of Compass Horizon is based on Compass Horizon's net asset value at December 31, 2009.

We have deleted the last sentence to the first paragraph under the risk on page 34 of the Amendment entitled, "Investors in this offering will incur immediate dilution upon the closing of the offering." The net asset value used to determine the number of shares of common stock that the Compass Horizon owners will receive in connection with the Share Exchange will be the net asset value of Compass Horizon as of the most recently available quarter end, which we anticipate will be March 31, 2010.

14. Please include the risks in the "immediate dilution" subsection in the "Summary" section.

The Fund has revised the disclosure on page 12 of the Amendment consistent with the Staff's comment.

15. With respect to the disclosure in the same subsection, will the Compass Horizon Owners and the purchasers in the public offering pay the same price for their shares in the Fund? Will any of the Fund shares be issued to the owners of Compass Horizon for services? Will the Fund shares issued to the Compass Horizon Owners be sold at net asset value per share? Your response should be framed in terms of the analysis in the "Big Apple Capital Corp. No-Action Letter" (publicly available May 6, 1982). How will the net asset value of the Fund be determined? Will an independent third-party valuation service be used?

In the Share Exchange, the Compass Horizon Owners will receive a number of shares of common stock of the Fund in an amount equal to the net asset value of Compass Horizon as of the most recently available quarter end, which we anticipate will be March 31, 2010. It is currently anticipated that the purchasers in the public offering will pay an amount which is equal to or slightly higher than the net asset value of the Fund.

None of the Fund shares will be issued to the owners of Compass Horizon for services.

As indicated above, the number of shares issued to the owners of Compass Horizon will be equal to the net asset value of Compass Horizon as of the most recently available quarter end, which we anticipate will be March 31, 2010.

The analysis in the "Big Apple Capital Corp. No-Action Letter" (publicly available May 6, 1982) ("Big Apple") is not applicable to the Share Exchange because the value of the shares to be issued in the Share Exchange is expected to be equal to or slightly lower than the public offering price. Unlike Big Apple (in which common stock was issued to a company's organizers at a price of \$0.05 per share in contemplation of a public offering of its common stock at a price of \$1.00 per share, or twenty times higher than the price per share for the company's organizers), the Fund contemplates that the price of the shares acquired in the Share Exchange will equal net asset value and that the public offering price will be equal to or slightly higher than the net asset value of the Fund.

The net asset value of the Fund as of March 31, 2010 (or the most recently available quarter close prior to the offering) will be determined by the Advisor and approved by the board of the Fund for use in

connection with the Share Exchange. No independent valuation service will be used to determine the net asset value of the Fund.

16. Please furnish us with a representation that the Fund will disclose estimates of the tax characteristics of its quarterly distributions in its semi-annual reports, even though its tax numbers cannot be finalized until its fiscal year-end. Estimates of the tax characterizations of the Fund's distributions in its semi-annual reports will alert shareholders to potential year-end tax consequences.

The Fund has advised us that it will disclose estimates of the tax characteristics of its quarterly distributions in the periodic reports it files with the Commission pursuant to the Securities Exchange Act of 1934.

17. Please inform us whether the Fund intends to report a distribution yield. If the Fund intends to report a distribution yield at any point prior to finalizing its tax figures, it should disclose the components of the distribution yield. In addition, any reports containing distribution yields should be accompanied by the SEC total return and/or yield and the Fund should also disclose that the distribution yield does not represent its performance.

The Fund does not currently intend to report a distribution yield.

Directors Qualifications and Review of Director Nominees, page 81

For the current members and each person that is appointed to the board, please disclose why the person's particular and specific experience, qualifications, attributes or skills led the board to conclude that such person should serve as a director of the Fund, in light of the Fund's business and structure, at the time that a filing containing the disclosure is made. See Item 18. 17. of Form N-2, (added by Investment Company Act Release No. 29092 (Dec. 16, 2009)).

The disclosure on page 85 of the Amendment regarding the current members of the board has been revised, as applicable to reflect why the person's particular and specific experience, qualifications, attributes or skills led the board to conclude that such person should serve as a directors of the Fund.

Other

1. Please explain to us why the registration statement does not include a statement of additional information.

The general instructions to Form N-2 provide that if the information required by Part B [Statement of Additional Information ("SAI")] is included in the prospectus, it need not be repeated in the SAI and a registrant need not prepare an SAI or refer to it in the prospectus if all of the information required to be in the SAI is included in the prospectus. Accordingly, the Registration Statement does not include an SAI because all of the information required to be in the SAI is included in the prospectus.

2. *Does the prospectus describe all of the fundamental policies of the Fund with respect to the activities listed in Item 17. 2. of Form N-2 and any other policy that the Fund deems fundamental. Does the Fund reserve freedom of action with respect to any of these activities?*

As indicated on page 108 of the Amendment, none of the Fund's investment policies have been deemed to be fundamental.

3. *Does the prospectus describe fully all significant investment policies of the Fund that are not deemed fundamental and that may be changed without the approval of the holders of a majority of the voting securities?*

The prospectus does describe fully all significant policies of the Fund that are not deemed fundamental and that may be changed without the approval of the holders of a majority of the voting securities of the Fund.

4. *Does the prospectus disclose the extent to which the Fund may engage in its fundamental and non-fundamental policies and the risks inherent in such policies?*

The prospectus does disclose the extent to which the Fund may engage in its non-fundamental policies and the risks inherent in such policies. As discussed in Comment 2 above, the Fund does not have any policies that it deems fundamental.

5. *Please inform us whether the officers, directors, and beneficial owners of more than 10% of the Fund's securities will file the ownership reports (Forms 3, 4, and 5) required by Section 16(a) of the Securities Exchange Act of 1934.*

The officers, directors and beneficial owners of more than 10% of each class of the Fund's equity securities will be expected to file the ownership reports (Forms 3, 4 and 5) required by Section 16(a) of the Securities Exchange Act of 1934.

6. *Please state in your response letter whether the FINRA has reviewed the terms and arrangements of the underwriting.*

The underwriters have made all filings required by FINRA with respect to the offering and will file any amendments to the Registration Statement and other documents that may be required. FINRA is in the process of reviewing the terms and arrangements of the offering. The Fund understands that in order to request acceleration of the effective date of the Registration Statement, you must be provided with a statement from FINRA expressing no objections to the compensation of, and other arrangements with, the underwriters.

Accounting Comments

On May 28, 2010 at 11:30 am (EST), Christina DeAngelo conveyed to me by telephone the following accounting comments:

1. *Generally, the numbers in the Form N-2 should be updated and blanks should be completed.*

The Fund's historical financial information as of March 31, 2010 has been included in the Amendment. In addition, all quarterly information and blanks driven off of March 31, 2010 net asset value have been completed. All blanks driven off of a mid-point of a price range and number of shares will be completed by amendment.

2. *Please ensure that your auditor consents are dated within 5 business days of the filing.*

The Fund confirms that its auditor consent is dated within 5 business day of the filing of the Amendment.

3. *Fee Table: In addition to the comment concerning "Acquired Fund Fees and Expenses," please advise in your response letter whether the line item "Cash and cash equivalents" as of March 31, 2010, included acquired funds, and, if it did, state the composition of cash and cash equivalents.*

As of March 31, 2010 the composition of the line item "Cash and cash equivalents" was as follows:

Checking account	\$10.4 million	(Bank of America)
Checking account	\$3.7 million	(US Bank)
Money Market Account	\$5.1 million	(Fidelity Prime MM Portfolio CLE)

As noted in the response to the comment concerning "Acquired Fund Fees and Expenses," none of the Fund's assets on the date of closing of the offering will be invested in an "acquired fund," including a money market fund.

4. *Asset Coverage: Please confirm that, upon conversion, the Fund will meet the asset coverage requirements of Section 61 of the 1940 Act.*

The Fund confirms that upon conversion to a BDC, the Fund will meet the asset coverage requirements of Section 61 of the 1940 Act.

5. *Financial Highlights: Please be certain that the financial statements include all of the required elements if Item 4 of Form N-2.*

The Fund respectfully advises the Staff that the Financial Highlights as required by Item 4.1 of Form N-2 are not required to be included for the Fund pursuant to Instruction 1 thereof.

6. *Confirmation of intent to comply: Please state in your response that the Fund future financial statements will be prepared in accordance with Regulation S-X and in particular the requirements of Sections 6-04, 6-07 and 6-09. In particular, please note that the statement of operations contained in the Form N-2 does not precisely fit the Regulation S-X format and that the balance sheet line items for "Total*

Liabilities and Member Capital” and “Total Assets” should not be given greater prominence than the line item for “Total Members Capital.”

The Fund acknowledges and confirms that its future financial statements will be prepared in accordance with Regulation S-X and in particular the requirements of Sections 6-04, 6-07 and 6-09.

* * * *

We appreciate the efforts of the staff and look forward to resolving the above comments as soon as possible. In response to the above comments, the Fund has also executed a written statement acknowledging certain items referenced in the closing of your original letter, which is attached hereto as Appendix A. Please contact the undersigned at the above number or Fred A. Summer at (614) 365-2743 if you have any questions regarding the responses set forth above.

Very truly yours,

/s/ Stephen C. Mahon

Stephen C. Mahon

Appendix A

In conjunction with the responses to the letter dated May 28, 2010, containing comments from the staff of the Securities and Exchange Commission (the “Staff”) in respect of the above-referenced Registration Statement on Form N-2, Horizon Technology Finance Corporation (the “Fund”) acknowledges that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Fund from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Fund may not assert this action as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

**HORIZON TECHNOLOGY FINANCE
CORPORATION**

By: /s/ Robert D. Pomeroy, Jr.

Robert D. Pomeroy, Jr.
Chief Executive Officer