

THOMAS FRIEDMANN

thomas.friedmann@dechert.com
+1 617 728 7120 Direct
+1 617 275 8389 Fax

June 24, 2019

VIA EDGAR

United States Securities and Exchange Commission
Division of Investment Management
100 F Street, NE
Washington, D.C. 20549
Attn: Ray Bee and Anthony Burak

Re: Horizon Technology Finance Corporation
Registration Statement on Form N-2
File Number: 333-225698

Ladies and Gentlemen:

Horizon Technology Finance Corporation, a Delaware corporation (the "Company"), has today filed with the U.S. Securities and Exchange Commission (the "Commission") post-effective amendment no. 3 ("Amendment No. 3") to its registration statement on Form N-2 (File No. 333-225698) (the "Registration Statement") and the prospectus contained therein, the "Prospectus"). On behalf of the Company, we hereby respond to the comments raised by the staff (the "Staff") of the Commission in the June 17, 2019 and June 18, 2019 telephone conversations between Anthony Burak and Ray Be, respectively, of the Staff and Thomas J. Friedmann and Thomas J. Cheeseman of Dechert LLP, outside counsel to the Company, relating to the Registration Statement.

For your convenience, the Staff's comments are included in this letter, and each comment is followed by the applicable response. We will also provide under separate cover courtesy copies of Amendment No. 3, as filed and marked to show changes from the initial filing of the Registration Statement, which includes the necessary conforming changes in response to the Staff's comments.

Capitalized terms used in this letter and not otherwise defined herein shall have the meanings specified in the Registration Statement.

Legal Comments

Description of Debt Securities That We May Issue

1. **In the section of the Prospectus captioned “Description of Debt Securities That We May Issue” on page 45, please include disclosure to reflect the stockholder approval of the reduction in net asset coverage.**

Response: The Company has modified its disclosure under the caption “Description of Debt Securities That We May Issue” to state that, pursuant to the provisions of the Small Business Credit Availability Act, the Company’s stockholders voted on October 30, 2018 to approve a reduction of the Company’s required asset coverage ratio.

Incorporation By Reference

2. **In the section of the Prospectus captioned “Incorporation By Reference” on page 71, please confirm that the Company has referred to all filings with the Commission that are require to be listed in such section as of the filing date of Amendment No. 3.**

Response: The Company has revised the disclosure under the caption “Incorporation By Reference” to incorporate all necessary filings as of filing date of Amendment No. 3.

Part C: Other Expenses of Issuance and Distribution

3. **In Item 27 of Part C of the Registration Statement, “Other Expenses of Issuance and Distribution,” please confirm that the amounts listed therein fully reflect the cost incurred or expected to be incurred as of the date of filing of Amendment No. 3.**

Response: The Company hereby confirms that it has reviewed and, as necessary, modified the amounts listed under the caption “Other Expenses of Issuance and Distribution,” to reflect accurately the Company’s costs listed therein as of the date of filing of Amendment No. 3.

Accounting Comments

Fees and Expenses

4. **Please disclose the fees and expenses associated with the Horizon Secured Loan Fund I LLC joint venture in the “Acquired Fund Fees and Expenses” item of the table under the caption “Fees and Expenses” section of the Prospectus.**

Response: The Company acknowledges the Staff’s comment and has updated the Acquired Fund Fees and Expenses line item as well as Note 9 thereto on Page 12 of the Prospectus to reflect the expenses associated with the Horizon Secured Loan Fund I LLC joint venture.

5. **In the fee calculation example under the caption “Fees and Expenses,” please revise the estimated expenses to the nearest round number.**

Response: The Company acknowledges the Staff’s comment and has revised the amounts stated in the fee example.

Incorporation by Reference

7. **In the section captioned “Incorporation By Reference,” please update and/or confirm the disclosure that appears under the heading “Common Stock It May Issue.”**

Response: The Company has revised the section to reflect the most up-to-date filing and disclosure information regarding the Company.

Available Information

8. **Under the caption “Available Information,” please confirm the contact information of the Company.**

Response: The Company has revised the disclosure in this section to include the correct contact information for the Company.

* * *



If you have any questions, please feel free to contact the undersigned by telephone at 617.728.7120 (or by email at thomas.friedmann@dechert.com). Thank you for your cooperation and attention to this matter.

Very truly yours,

/s/ Thomas J. Friedmann

Thomas J. Friedmann

cc: Daniel Trolio, Horizon Technology Finance Corporation
John C. Bombara, Horizon Technology Finance Corporation
