

May 9, 2023

VIA EDGAR

United States Securities and Exchange Commission
Division of Investment Management
100 F Street, N.E.
Washington, DC 20549
Attn: Ray Be

Re: Horizon Technology Finance Corporation
The Amendment to the Definitive Proxy Statement filed on PRER14A
Filed May 3, 2023
File Number: 814-00802

Dear Mr. Be:

On behalf of Horizon Technology Finance Corporation (the "Company"), we hereby respond to the comments of the staff (the "Staff") of the Securities and Exchange Commission received from Ray Be of the Staff on May 8, 2023 relating to the Amendment ("Amendment") to the Company's Definitive Proxy Statement (the "Definitive Proxy Statement") filed on PRER14A. The Company has today filed its Definitive Additional Proxy Solicitation Materials filed on DEFR14A (the "Definitive Additional Proxy Solicitation Materials"). For your convenience, a transcription of the Staff's comment is included in this letter, and the comment is followed by the applicable response. Except as provided in this letter, terms used but not defined herein shall have the meaning set forth in the Definitive Proxy Statement.

- 1. Please revise the Explanatory Note to clarify that (1) existing proxies will not be voted on Proposal 3 or Proposal 4 because no authority is granted pursuant to the existing proxies, (2) unless the existing proxy is revoked and a new proxy is granted, the effect of the inaction will have the same effect as a withhold vote, and (3) the election of directors requires a plurality of the votes cast at the meeting, thus withhold votes have no effect on Proposal 3 and Proposal 4.**

Response: The disclosure has been revised accordingly.

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) or Thomas J. Cheeseman at 617.728.7162 (or by email at thomas.cheeseman@dechert.com). Thank you for your cooperation and attention to this matter.

Very truly yours,

/s/ Thomas J. Friedmann

Thomas J. Friedmann

cc:

Robert Pomeroy, Horizon Technology Finance Corporation
John C. Bombara, Horizon Technology Finance Corporation
Ken Young, Dechert LLP
Thomas J. Cheeseman, Dechert LLP