

June 4, 2010

VIA E-MAIL & EDGAR

Dominic Minore, Esq.
Senior Counsel
Division of Investment Management
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Fifth Street Finance Corp.
Registration Statement on Form N-2 filed on April 12, 2010
File No. 333-166012

Dear Mr. Minore:

On behalf of Fifth Street Finance Corp. (the "Company"), set forth below are the Company's responses to the verbal comments provided by the staff of the Division of Investment Management (the "Staff") of the Securities and Exchange Commission (the "SEC") to the Company on June 1, 2010. The Staff's comments are set forth below in italics and are followed by the Company's responses. References to the Company's prospectus (the "Prospectus") and form of preliminary prospectus supplement (the "Prospectus Supplement") are to the prospectus and form of preliminary prospectus supplement included in pre-effective amendment No. 1 to the Company's registration statement on Form N-2 that has been filed with the SEC on the date hereof.

1. *Please include the fourth, fifth and sixth paragraphs from the cover page of the Prospectus on the cover page of any prospectus supplement to such Prospectus.*

The Company has complied with the comment. See the cover page of the Prospectus Supplement.

2. *In any prospectus supplement to the Prospectus please include the total and per share net proceeds after underwriting discounts, commissions and expenses to the Company in a footnote to the table typically included on the cover page of prospectus supplements provided in connection with shelf take downs from a registration statement.*
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The Company has complied with the comment. See the cover page of the Prospectus Supplement.

3. *We reference comment no. 4 in our comment letter dated May 18, 2010. Please undertake to include the same language in any prospectus supplement to the Prospectus.*

The Company has updated the disclosure accordingly. See page S-ii of the Prospectus Supplement.

4. *Please explain "PIK" in plain English on page 1 of the Prospectus and undertake to explain PIK in plain English in the summary section of any prospectus supplement to such Prospectus.*

The Company has updated the disclosure accordingly. See page 1 of the Prospectus and page S-1 of the Prospectus Supplement.

5. *Please explain the 200% asset coverage requirement on page 2 of the Prospectus in plain English and add the amount of borrowings permitted under such requirement based on total assets as of the end of the last completed quarterly period and undertake to do the same in the summary section of any prospectus supplement to such Prospectus.*

The Company has updated the disclosure accordingly. See page 2 of the Prospectus and page S-2 of the Prospectus Supplement.

6. *We refer to the disclosure regarding the ING facility and the Wells Fargo facility. Please disclose the aggregate percentage of assets currently pledged under the Wells Fargo facility and the ING facility.*

The Company has updated the disclosure accordingly. See page 5 of the Prospectus.

7. *Please revise the footnote regarding "interest payments on borrowed funds" in the fees and expenses table in the Prospectus to reflect the projected interest payments on borrowed funds for the Company's fiscal year end.*
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The Company has revised the disclosure accordingly. See page 11 of the Prospectus.

8. *Please add the word “our” after the word “because” in footnote 8 to the fees and expenses table in the Prospectus.*

The Company has updated the disclosure accordingly. See page 11 of the Prospectus.

Legality Opinion

9. *Please add that the Company has examined “such records, documents or other instruments as we in our judgment deem necessary or appropriate for us to render the opinions set forth in this opinion letter” to the second paragraph of the opinion.*

The Company has revised the legality opinion accordingly. See page 1 of the legality opinion.

10. *Please add that the opinion is also limited to reported judicial decisions interpreting the effect of the General Corporation Law of the State of Delaware as of the date of the opinion.*

The Company has revised the legality opinion accordingly. See page 2 of the legality opinion.

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If you have any questions or additional comments concerning the foregoing, please contact the undersigned at (202) 383-0176, or Harry S. Pangas at (202) 383-0805.

Sincerely,

/s/ Steven B. Boehm
Steven B. Boehm

Enclosure

cc: Mr. Leonard M. Tannenbaum/ Chief Executive Officer
Harry S. Pangas, Esq.
Anne W. Gray, Esq.