UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

ENERGY TRANSFER PARTNERS, L.P.

(Exact name of registrant as specified in its charter)

Delaware (State of incorporation or organization)

73-1493906 (I.R.S. Employer Identification No.)

8111 Westchester Drive, Suite 600,
Dallas, Texas 75225
(Address of principal executive offices and zip code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class to be so registered

Series C Fixed-to-Floating Rate Cumulative Redeemable Perpetual Preferred Units

Name of each exchange on which each class is to be registered
New York Stock Exchange

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c) or (e), check the following box.
If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d) or (e), check the following box.
If this form relates to the registration of a class of securities concurrently with a Regulation A offering, check the following box. \Box
Securities Act registration statement or Regulation A offering statement file number to which this form relates (if applicable): 333-221411
Securities to be registered pursuant to Section 12(g) of the Act: None

INFORMATION REQUIRED IN REGISTRATION STATEMENT

Item 1. Description of Registrant's Securities to be Registered.

A description of the Series C Fixed-to-Floating Rate Cumulative Redeemable Perpetual Preferred Units (the "Series C Preferred Units") representing limited partner interests in Energy Transfer Partners, L.P. (the "Registrant") is set forth under the captions "Description of Series C Preferred Units" and "Material Federal Income Tax Consequences" in the Registrant's prospectus supplement dated April 18, 2018 and filed pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which prospectus supplement constitutes a part of the Registrant's Registration Statement on Form S-3 (No. 333-221411) and which descriptions are incorporated herein by reference. The summary descriptions of the Series C Preferred Units do not purport to be complete and are qualified in their entirety by reference to the exhibits, which are hereby incorporated herein and may be amended from time to time.

Item 2. Exhibits.

The following exhibits to this Registration Statement on Form 8-A are incorporated by reference from the documents specified which have been filed with the Securities and Exchange Commission.

Exhibit <u>Number</u>	Description of the Exhibit
1	Registration Statement on Form S-3 (Registration No. 333-221411), filed on November 8, 2017, as supplemented by the Prospectus Supplement, dated April 18, 2018, filed pursuant to Rule 424(b) on April 20, 2018 (incorporated herein by reference).
2	Amended Certificate of Limited Partnership of Energy Transfer Partners, L.P. (formerly known as Sunoco Logistics Partners L.P.), dated April 28, 2017 (incorporated by reference to Exhibit 3.3 to Registrant's Form 8-K filed on April 28, 2017 (File No. 001-31219)).
3	Fourth Amended and Restated Agreement of Limited Partnership of Energy Transfer Partners, L.P. dated as of April 28, 2017 (incorporated by reference to Exhibit 3.4 to the Registrant's Form 8-K filed April 28, 2017 (File No. 001-31219)).
4	Amendment No. 1, dated November 16, 2017, to the Fourth Amended and Restated Agreement of Limited Partnership of Energy Transfer Partners, L.P., dated April 28, 2017 (incorporated by reference to Exhibit 3.1 to Registrant's Form 8-K filed on November 16, 2017 (File No. 001-31219)).
5	Amendment No. 2, dated April 25, 2018, to the Fourth Amended and Restated Agreement of Limited Partnership of Energy Transfer Partners, L.P., dated April 28, 2017 (incorporated by reference to Exhibit 3.1 to the Registrant's Form 8-K filed April 25, 2018 (File No. 001-31219)).

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

ENERGY TRANSFER PARTNERS, L.P.

By: Energy Transfer Partners GP, L.P. its General Partner

By: Energy Transfer Partners, L.L.C. its General Partner

By: /s/ James M. Wright

James M. Wright General Counsel

Date: April 26, 2018