As filed with the Securities and Exchange Commission on April 27, 2017

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-3 REGISTRATION STATEMENT **UNDER THE SECURITIES ACT OF 1933**

Energy Transfer Partners, L.P.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) **Energy Transfer Partners, L.P.** 8111 Westchester Drive, Suite 600 Dallas, TX (Address of Principal Executive Offices)

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

> 75225 (Zip Code)

Thomas E. Long Chief Financial Officer Energy Transfer Partners, L.P. 8111 Westchester Drive, Suite 600 Dallas, Texas 75225 (214) 981-0700

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

Approximate date of commencement of proposed sale to the public: Not applicable

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. \Box

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

П Large accelerated filer \mathbf{X} Accelerated filer Smaller reporting company Non-accelerated filer □ (Do not check if a smaller reporting company) Emerging growth company If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for comply with anynew or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act

EXPLANATORY NOTE

DEREGISTRATION OF SECURITIES

This Post-Effective Amendment relates to the Automatic Shelf Registration Statement on Form S-3 (the "Registration Statement"), File No. 333-202507, of Energy Transfer Partners, L.P., a Delaware limited partnership ("ETP") filed with the Securities and Exchange Commission on March 5, 2015. The Registration Statement registered the offer and sale from time to time of an indeterminate number of common units representing limited partner interests and debt securities (collectively, the "Securities").

On April 26, 2017, the common unitholders of ETP approved the Agreement and Plan of Merger, dated as of November 20, 2016, as amended by Amendment No. 1 thereto, dated as of December 16, 2016 (as so amended, the "Merger Agreement"), by and among (i) ETP, (ii) Energy Transfer Partners GP, L.P., a Delaware limited partnership, (iii) Sunoco Logistics Partners L.P., a Delaware limited partnership ("SXL"), (iv) Sunoco Partners LLC, a Pennsylvania limited liability company, (v) SXL Acquisition Sub LLC, a Delaware limited liability company, (vi) SXL Acquisition Sub LP, a Delaware limited partnership ("SXL Merger Sub LP"), and, solely for purposes of certain provisions therein, Energy Transfer Equity, L.P., a Delaware limited partnership. Pursuant to the terms of the Merger Agreement, SXL Merger Sub LP merged with ETP, with ETP continuing as the surviving entity and as a wholly owned subsidiary of SXL (the "Merger"). Each outstanding common unit representing a limited partner interest of ETP was converted into the right to receive 1.5 newly issued common units representing limited partner interests of SXL.

In connection with the anticipated completion of the transactions contemplated by the Merger Agreement, ETP has terminated all offerings of Securities pursuant to the Registration Statement. In accordance with undertakings made by ETP in the Registration Statement to remove from registration, by means of a post-effective amendment, any of the Securities that had been registered for issuance that remain unsold at the termination of such offering, ETP hereby removes from registration all of such Securities of ETP registered but unsold under the Registration Statement.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Dallas, State of Texas on April 27, 2017.

ENERGY TRANSFER PARTNERS, L.P.

- By: Energy Transfer Partners GP, LP, its general partner
- By: Energy Transfer Partners, L.L.C., its general partner

Title: Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in their capacities indicated, which are with Energy Transfer Partners, L.L.C., the general partner of Energy Transfer Partners GP, L.P., the general partner of Energy Transfer Partners, L.P., on the dates indicated:

Signature	Title	Date
/s/ Kelcy L. Warren Kelcy L. Warren	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	April 27, 2017
/s/ Thomas E. Long Thomas E. Long	Chief Financial Officer (Principal Financial Officer)	April 27, 2017
/s/ A. Troy Sturrock A. Troy Sturrock	Vice President and Controller (Principal Accounting Officer)	April 27, 2017
/s/ Matthew S. Ramsey Matthew S. Ramsey	President, Chief Operating Officer and Director	April 27, 2017
/s/ David K. Skidmore David K. Skidmore	Director	April 27, 2017
/s/ Ted Collins, Jr. Ted Collins, Jr.	Director	April 27, 2017
/s/ Marshall S. McCrea, III Marshall S. McCrea, III	Director	April 27, 2017
/s/ Michael K. Grimm Michael K. Grimm	Director	April 27, 2017

By: /s/ Thomas E. Long

Name: Thomas E. Long