UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 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) 23-3096839 (I.R.S. Employer Identification No.)

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

SECOND AMENDED AND RESTATED ENERGY TRANSFER PARTNERS, L.P. 2008 LONG-TERM INCENTIVE PLAN

ENERGY TRANSFER PARTNERS, L.P. AMENDED AND RESTATED 2011 LONG-TERM INCENTIVE PLAN (Full title of the plans)

> Thomas E. Long Chief Financial Officer Energy Transfer Partners, L.P. 8111 Westchester Drive, Suite 600 Dallas Texas 75225 (214) 981-0700 (Name, address and telephone number of agent for service)

copies to:

Michael J. Swidler Lande A. Spottswood Mike Rosenwasser Vinson & Elkins L.L.P. 666 Fifth Avenue, 26th Floor New York, New York 10103 (212) 237-0000 James M. Wright, Jr. General Counsel Energy Transfer Partners, L.L.C. 8111 Westchester Drive, Suite 600 Dallas, Texas 75225 (214) 981-0700 William N. Finnegan IV Ryan J. Maierson Debbie P. Yee Latham & Watkins LLP 811 Main Street, Suite 3700 Houston, Texas 77002 (713) 546-5400

Accelerated filer

Smaller Reporting Company

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 Securities Exchange Act of 1934, as amended (the "Exchange Act").

Large accelerated filer 🛛 🗵

Non-accelerated filer \Box (Do not check if 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 complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

EXPLANATORY NOTE

The Registration Statement filed by Energy Transfer Partners, L.P., a Delaware partnership (the "Registrant") on Form S-8 (File No. 333-217592) (the "Registration Statement") on May 2, 2017 was filed prior to the issuance of the consent by the Registrant's Independent Registered Public Accounting Firm included as Exhibit 23.1 in that filing. This Post-Effective Amendment No. 1 (the "Post-Effective Amendment") to the Registrant's Registration Statement is being filed following the issuance of the consent by the Registrant's Independent Registered Public Accounting Firm attached as Exhibit 23.1 hereto, and Exhibit 23.1 hereto supersedes Exhibit 23.1 to the Registration Statement in all respects. No awards were granted in reliance on the Registration Statement between the filing of the Registration Statement and the filing of this Post-Effective Amendment. Consequently, the opinion of legal counsel originally filed as Exhibit 5.1 to the Registration Statement has been updated to include the date hereof and the filing of this Post-Effective Amendment without further alteration. Exhibit 5.1 to this Post-Effective Amendment supersedes Exhibit 5.1 to the Registration Statement supersedes Exhibit 5.1 to the Registration Statement supersedes Exhibit 5.1 to the Registration Statement supersedes Exhibit 5.1 to this Post-Effective Amendment supersedes Exhibit 5.1 to the Registration Statement Statem

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, (the "Securities Act") the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Houston, State of Texas, on May 3, 2017.

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/ Thomas E. Long

Thomas E. Long Chief Financial Officer

Note: No other person is required to sign this Post-Effective Amendment in reliance upon Rule 478 of the Securities act of 1933.

EXHIBIT INDEX

Exhibit <u>Number</u>

Description

- 5.1* Opinion of Vinson & Elkins L.L.P. as to the legality of the securities being registered.
- 23.1* Consent of Grant Thornton LLP.
- 23.2* Consent of Vinson & Elkins L.L.P. (contained in Exhibit 5.1 hereto).

* Filed herewith.

Vinson&Elkins

May 3, 2017

Energy Transfer Partners, L.P. 8111 Westchester Drive, Suite 600 Dallas, Texas 75225

Ladies and Gentlemen:

We have acted as counsel for Energy Transfer Partners, L.P., a Delaware limited partnership (the "Partnership"), in connection with the Partnership's registration under the Securities Act of 1933, as amended (the "Act"), of the offer and sale of an aggregate of up to 13,506,273 of the Partnership's common units, which represent limited partnership interests (the "Units"), pursuant to the Partnership's registration statement on Form S-8 (the "Registration Statement") filed with the Securities and Exchange Commission on May 2, 2017 and amended by the Post-Effective Amendment No. 1 to such Registration Statement to be filed on May 3, 2017, which Units may be issued from time to time in accordance with the terms of the Second Amended and Restated Energy Transfer Partners, L.P. 2008 Long-Term Incentive Plan and the Energy Transfer Partners, L.P. Amended and Restated 2011 Long-Term Incentive Plan (collectively, the "Plans").

In reaching the opinions set forth herein, we have examined and are familiar with originals or copies, certified or otherwise identified to our satisfaction, of such documents and records of the Partnership and such statutes, regulations and other instruments as we deemed necessary or advisable for purposes of this opinion, including (i) the Registration Statement, (ii) certain resolutions adopted by the board of directors of the general partner of the general partner of the Partnership, (iii) the Plans, and (iv) such other certificates, instruments, and documents as we have considered necessary for purposes of this opinion. As to any facts material to our opinion, we have made no independent investigation or verification of such facts and have relied, to the extent that we deem such reliance proper, upon certificates of public officials and officers or other representatives of the Partnership.

We have assumed (i) the legal capacity of all natural persons, (ii) the genuineness of all signatures, (iii) the authority of all persons signing all documents submitted to us on behalf of the parties to such documents, (iv) the authenticity of all documents submitted to us as originals, (v) the conformity to authentic original documents of all documents submitted to us as copies, and (vi) that all information contained in all documents reviewed by us is true, correct and complete. In addition, we have assumed that the Units will be issued in accordance with the terms of the Plans.

Based on the foregoing and subject to the limitations set forth herein, and having due regard for the legal considerations we deem relevant, we are of the opinion that the Units have been duly authorized and, when the Units are issued by the Partnership in accordance with the terms of the Plans, the Units will be validly issued, fully paid (to the extent required by the Partnership's partnership agreement) and non-assessable, except as such nonassessability may be limited by Sections 17-303, 17-607 and 17-804 of the Delaware Revised Uniform Limited Partnership Act or within the Partnership's partnership agreement.

This opinion is limited in all respects to the Delaware Revised Uniform Limited Partnership Act. We express no opinion as to any matter other than as expressly set forth above, and no opinion on any other matter may be inferred or implied herefrom. The opinions expressed herein are rendered as of the date hereof and we expressly disclaim any obligation to update this letter or advise you of any change in any matter after the date hereof.

Vinson & Elkins LLP Attorneys at Law

Austin Beijing Dallas Dubai Hong Kong Houston London Moscow New York Palo Alto Richmond Riyadh San Francisco Taipei Tokyo Washington Trammell Crow Center, 2001 Ross Avenue, Suite 3700 Dallas, TX 75201-2975 Tel +1.214.220.7700 Fax +1.214.220.7716 www.velaw.com

V&E

Energy Transfer Partners, L.P. May 3, 2017 Page 2

This opinion letter may be filed as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Act.

Very truly yours,

/s/ Vinson & Elkins L.L.P.

Vinson & Elkins L.L.P.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated February 24, 2017 with respect to the consolidated financial statements and internal control over financial reporting of Sunoco Logistics Partners L.P. (renamed Energy Transfer Partners, L.P. on April 28, 2017) included in the Annual Report on Form 10-K for the year ended December 31, 2016, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned reports in this Registration Statement.

/s/ GRANT THORNTON LLP

Dallas, Texas May 3, 2017