

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. ____)*

NuStar Energy L.P.
(Name of Issuer)

Common Units
(Title of Class of Securities)

67058H102
(CUSIP Number)

December 31, 2010
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act, but shall be subject to all other provisions of the Act (however, see the Notes).

| | |
|---|---|
| 1 | NAME OF REPORTING PERSON Tortoise Capital Advisors, L.L.C. |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/> (See Instructions) |
| 3 | SEC USE ONLY |
| 4 | CITIZENSHIP OR PLACE OF ORGANIZATION Delaware |
| | 5 SOLE VOTING POWER 0 |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 6 SHARED VOTING POWER 3,196,805 (see Item 4) |
| | 7 SOLE DISPOSITIVE POWER 0 |
| | 8 SHARED DISPOSITIVE POWER 3,420,520 (see Item 4) |
| 9 | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,420,520 (see Item 4) |
| 10 | CHECK IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES (See Instructions) Not Applicable |
| 11 | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 5.3% (see Item 4) |
| 12 | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IA |

Item 1(a) Name of Issuer:

NuStar Energy L.P.

Item 1(b) Address of Issuer's Principal Executive Offices:

2330 North Loop 1604 West, San Antonio, Texas 78248

Item 2(a) Name of Persons Filing:

This 13G is being filed by Tortoise Capital Advisors, L.L.C., a Delaware limited liability company ("TCA").

Item 2(b) Address of Principal Business Office or, if None, Residence:

The principal business address is 11550 Ash Street, Suite 300, Leawood, Kansas 66211.

Item 2(c) Citizenship:

TCA is a Delaware limited liability company.

Item 2(d) Title of Class of Securities:

Common Units

Item 2(e) CUSIP Number:

67058H102

Item 3 The Reporting Person is:

TCA is an investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E) .

Item 4 Ownership:

TCA acts as an investment adviser to certain closed-end investment companies registered or regulated under the Investment Company Act of 1940. TCA, by virtue of investment advisory agreements with these investment companies, has all investment and voting power over securities owned of record by these investment companies. However, despite their delegation of investment and voting power to TCA, these investment companies may be deemed to be the beneficial owners under Rule 13d-3 of the Act, of the securities they own of record because they have the right to acquire investment and voting power through termination of their investment advisory agreement with TCA. Thus, TCA has reported that it shares voting power and dispositive power over the securities owned of record by these investment companies. TCA also acts as an investment advisor to certain managed accounts. Under contractual agreements with individual account holders, TCA, with respect to the securities held in the managed accounts, shares investment and voting power with certain account holders, and has no voting power but shares investment power with certain other account holders. TCA may be deemed the beneficial owner of the securities covered by this statement under Rule 13d-3 of the Act. None of the securities listed below are owned of record by TCA, and TCA disclaims any beneficial interest in such securities.

- (a) Amount beneficially owned: 3,420,520
- (b) Percent of class: 5.3%
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 3,196,805
 - (iii) Sole power to dispose or to direct the disposition of: 0
 - (iv) Shared power to dispose or to direct the disposition of: 3,420,520

Item 5 **Ownership of Five Percent or Less of a Class:**

Not applicable.

Item 6 **Ownership of More than Five Percent on Behalf of Another Person:**

The investment companies and managed accounts discussed in Item 4 above have the right to receive all dividends from, and the proceeds from the sale of, the securities held in their respective accounts. The interest of any one such person does not exceed 5% of the class of securities.

Item 7 **Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person:**

Not Applicable

Item 8 **Identification and Classification of Members of the Group:**

Not Applicable

Item 9 **Notice of Dissolution of Group:**

Not Applicable

Item 10 **Certifications:**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Tortoise Capital Advisors, L.L.C.

Dated: February 11, 2011

By: /s/ Terry Matlack
Name: Terry Matlack
Title: Managing Director