UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 15, 2011

DUNCAN ENERGY PARTNERS L.P.

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)

1-33266 (Commission File Number)

20-5639997 (I.R.S. Employer Identification No.)

1100 Louisiana Street, 10th Floor, Houston, Texas (Address of Principal Executive Offices)

77002 (Zip Code)

Registrant's Telephone Number, including Area Code: (713) 381-6500

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):
☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

First Amendment to Second Amended and Restated Limited Liability Company Agreement of Acadian Gas, LLC

On March 15, 2011, DEP Operating Partnership, L.P. ("DEP OLP"), a Delaware limited partnership and a wholly owned subsidiary of Duncan Energy Partners L.P., a Delaware limited partnership ("DEP"), entered into a First Amendment to Second Amended and Restated Limited Liability Company Agreement of Acadian Gas, LLC (the "First Amendment"), by and between DEP OLP and Enterprise Products Operating LLC ("EPO"), a Texas limited liability company and an indirect wholly owned subsidiary of Enterprise Products Partners L.P., a Delaware limited partnership. EPO beneficially owns 100% of DEP Holdings, LLC, the general partner of DEP.

The First Amendment amends Section 4.02(b) of the LLC agreement, modifying the notice that the Board of Directors of Acadian Gas, LLC must give to members in connection with requests for additional capital contributions, and the period during which a member may respond to such request. These modifications provide the parties with increased flexibility in terms of cash management.

The description of the First Amendment in this Current Report on Form 8-K is qualified in its entirety by reference to the full text of the First Amendment, which is attached hereto as Exhibit 10.1 and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

Description

(d) Exhibits.

Exhibit No.

First Amendment to Second Amended and Restated Limited Liability Company Agreement of Acadian Gas, LLC, dated as of March 15, 2011, by and between Enterprise Products Operating LLC and DEP Operating Partnership, L.P.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned hereunto duly authorized.

DUNCAN ENERGY PARTNERS L.P.

By: DEP HOLDINGS, LLC,

its General Partner

Date: March 15, 2011 By: /s/ Bryan F. Bulawa

Name: Bryan F. Bulawa

Title: Senior Vice President, Chief Financial Officer and

Treasurer of the General Partner

Exhibit Index

Exhibit No. Description

First Amendment to Second Amended and Restated Limited Liability Company Agreement of Acadian Gas, LLC, dated as of March 15, 2011, by and between Enterprise Products Operating LLC and DEP Operating Partnership, L.P.

FIRST AMENDMENT TO SECOND AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT OF ACADIAN GAS, LLC

This FIRST AMENDMENT (this "Amendment") to the Second Amended and Restated Limited Liability Company Agreement of Acadian Gas, LLC dated as of June 1, 2010 (the "LLC Agreement") by and between Enterprise Products Operating LLC, a Texas limited liability company ("Enterprise Products LLC"), and DEP Operating Partnership, L.P., a Delaware limited partnership ("DEP OLP"), is made and entered into effective as of March 15, 2011, pursuant to the terms of the LLC Agreement and in accordance with Section 15.04 thereof.

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Enterprise Products LLC and DEP OLP hereby agree as follows:

Section 1. AMENDMENT. Section 4.02(b) of the LLC Agreement is hereby amended and restated to read, in its entirety, as follows:

- (b) The Board of Directors shall provide written notice to the Members of the initial date contributions are due (which date shall be from time to time as is reasonably necessary in order for the Company to meet its payment obligations), the aggregate amount of the Capital Contribution required and each Member's share thereof, and setting forth in reasonable detail the proposed Expansion Project and Expansion Costs associated therewith. Each Member shall advise the Board of Directors in writing within five Business Days whether it elects to make an Expansion Capital Contribution.
- Section 2. **RATIFICATION OF LLC AGREEMENT.** Except as expressly modified and amended herein, all of the terms and conditions of the LLC Agreement shall remain in full force and effect.
- Section 3. **GOVERNING LAW.** THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE.

(Signature Page Follows)

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first set forth above.

ENTERPRISE PRODUCTS OPERATING LLC

By: Enterprise Products OLPGP, Inc., its managing member

By: /s/ W. Randall Fowler

W. Randall Fowler

Executive Vice President and Chief Financial Officer

DEP OPERATING PARTNERSHIP, L.P.

By: DEP OLPGP, LLC,

its general partner

By: /s/ Bryan F. Bulawa

Bryan F. Bulawa

Vice President and Treasurer