



DIVISION OF  
CORPORATION FINANCE

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

November 23, 2011

Via E-mail

R. Brooks Sherman, Jr.  
Chief Financial Officer  
Inergy Midstream, LLC  
Two Brush Creek Boulevard, Suite 200  
Kansas City, Missouri 64112

**Re: Inergy Midstream, LLC  
Amendment No. 3 to  
Registration Statement on Form S-1  
Filed November 21, 2011  
File No. 333-176445**

Dear Mr. Sherman:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus Cover Page

1. Please revise your cover art to clearly indicate those projects which are currently in progress. For example, and not as an exhaustive list, please:
  - clarify that your Watkins Glen NGL storage facility is currently being developed; and
  - more prominently indicate that your MARC I line is still in construction.

Please also differentiate between those pipelines which are and are not a part of your transportation assets.

Summary Historical and Pro Forma Financial and Operating Data, page 15

2. Your statement that your pro forma condensed consolidated financial statements give pro forma effect to the change in your organizational structure from a limited liability company to a limited partnership appears incorrect since your historical financial statements already reflect your structure as a limited partnership. Similarly, your statement that you have given pro forma effect to the issuance by you to your general partner of a non-economic general partner interest appears incorrect. Please revise. Also apply this comment to your Selected Historical and Pro Forma Financial and Operating Data on page 69.

Non-GAAP Financial Measures, page 17

3. Please refer to your reconciliation of net income to EBITDA and Adjusted EBITDA at the bottom of page 17. Please revise the pro forma column so that it is mathematically correct and adjust the amount of Pro Forma Adjusted EBITDA disclosed on page 16 accordingly. Also apply this comment to your Selected Historical and Pro Forma Financial and Operating Data on page 69.
4. We note that you are presenting Pro Forma Adjusted EBITDA on page 16. Based on your statement that the GAAP measures most directly comparable to Adjusted EBITDA are net income and net cash provided by operating activities, please provide reconciliations of this non-GAAP measure to its most directly comparable GAAP measures. Specifically, please also provide a reconciliation to net cash provided by operating activities. Also apply this comment to your Selected Historical and Pro Forma Financial and Operating Data on page 69.

Risk Factors, page 19

5. Please refer to the risk factor concerning your revolving credit facility on page 27 and the similar disclosure concerning the significant terms of this revolving credit facility under the heading "Revolving Credit Facility" on page 85. It is unclear from these disclosures whether you currently have entered into this revolving credit facility. For example, you state that in connection with this offering, you "will enter" into this facility, implying that you have not yet done so. However, you also disclose the covenants and restrictive provisions of this revolving credit facility in detail, implying that you have already negotiated the terms of this facility with the lender, including the specified interest rate, specified consolidated leverage ratio, and specified interest coverage ratio. Please revise the disclosures throughout your filing to clearly indicate whether you currently have entered into this facility. If you will not enter into this facility until the closing of your offering, please either explain to us how these terms have been guaranteed in advance by the lender or revise your disclosures to clarify that these are the expected (not actual) terms of the facility.

Use of Proceeds, page 45

6. We note your disclosure that you will use the proceeds of this offering to repay indebtedness outstanding under your promissory note and that the “borrowings under [y]our promissory note, which [you] will assume from NRGY immediately prior to the closing of this offering, will be incurred by NRGY to repay, repurchase or redeem existing debt of NRGY.” We also note your statement on pages 83 and 84 that your “operations, including capital expenditures and acquisitions, have historically been funded by NRGY” and that you have “historically paid NRGY all cash generated from operations.” If the existing debt of NRGY being repaid, redeemed or repurchased was incurred within one year and relates to your operations, please describe the use of the proceeds of such indebtedness other than short-term borrowings used for working capital. Please see Instruction 4 to Item 504 of Regulation S-K. If the existing debt of NRGY being repaid, redeemed or repurchased does not relate to your operations, please revise your filing in an appropriate location to better explain why you are assuming the borrowings under your promissory note.

Dilution, page 47

7. To assist our review of your dilution disclosures, once you determine the pricing for your offering, please consider supplementally providing us with the details of your dilution calculations including your calculation of pro forma net tangible book value per common unit before the offering and your calculations supporting the disclosures in footnote 3 to your dilution table.

Cash Distribution Policy and Restrictions on Distributions, page 48

8. Please refer to comment 18 in our letter dated September 23, 2011 and your response to that comment dated October 7, 2011. Please confirm to us, if true, that the terms of your revolving credit facility do not contain restrictions on the ability of your subsidiaries to make distributions to you.

Unaudited Pro Forma Cash Available for Distribution, page 53

9. Please refer to footnote 7 to this table. We note your assumption that your expansion capital expenditures were funded by borrowings on your revolving credit facility. Please revise footnote 7 to confirm, if true, that you would have been in compliance with the covenants of your revolving credit facility after these borrowings.

Estimated Cash Available for Distribution for the 12 Months Ending December 31, 2012, page 53

Assumptions and Considerations, page 56

10. Please refer to comment 23 in our letter dated September 23, 2011 and your response to that comment dated October 7, 2011. As previously requested, please quantify the revenues and expenses related to the acquired Seneca Lake facility during the three months ended September 30, 2011, and based on this historical data, explain the basis for any assumed changes in revenues and expenses between September 30, 2011 and December 31, 2012. Please ensure that your disclosures clarify the basis for your assumption that a facility that generated \$1.8 million in revenue and a \$0.1 million net loss in the quarter ended September 30, 2011 will contribute \$9.6 million to cash available for distribution over the 12 months ended December 31, 2012.
11. Please refer to your discussion of financing on page 60. We note your assumption that your expansion capital expenditures will be funded by borrowings on your revolving credit facility. Please revise to confirm, if true, that you would be in compliance with the covenants of your revolving credit facility after these borrowings. Please also clearly disclose the maximum borrowing under this revolving credit facility to clarify the limitations on funding expansion capital expenditures in future periods by borrowings on this facility.

Certain Relationships and Related Party Transactions, page 128

Other Transactions with Related Persons, page 133

12. Please provide the rate of interest payable on the promissory note referenced in the penultimate paragraph of this section. We note you provide this information on page 45. Please see Item 404(a)(5) of Regulation S-K. Please also provide the interest rate information for the \$129.8 million of indebtedness outstanding to Inergy Propane.

Unaudited Pro Forma Condensed Consolidated Financial Statements, page F-2

13. Please refer to comment 53 in our letter dated September 23, 2011 and your response to that comment dated October 7, 2011. Please provide pro forma earnings per limited partner unit in your next amendment. Please also provide a pro forma footnote explaining how such amount was calculated. While the explanation in the pro forma footnote may be relatively brief, you should supplementally provide us with a more detailed analysis of the guidance in ASC 260 to support your treatment of the incentive distribution rights when calculating earnings per limited partner unit. In this regard, based on your disclosure on page 154 under the heading "Transfer of Incentive Distribution Rights," it appears that the incentive distribution rights may represent a separate class of nonvoting limited partner interest requiring the two-class method.

Financial Statements for the Fiscal Year Ended September 30, 2011, page F-6

Report of Independent Registered Public Accounting Firm, page F-6

14. We note that your auditors have provided a draft report and draft consent in the form that will be expressed at effectiveness. Please note that your registration statement cannot be declared effective until your auditors have finalized their report and consent.

Note 2. Summary of Significant Accounting Policies, page F-13

15. We note that you removed your accounting policy for gas exchange contracts. Please tell us why.

Note 9. Subsequent Events, page F-20

16. Please tell us why your disclosure refers to items subsequent to the date of the audit instead of items subsequent to the date of your balance sheet. Also tell us how you considered disclosing the terms of your new revolving credit facility as a subsequent event.

You may contact Lisa Sellars, Staff Accountant, at (202) 551-3348 or Jennifer Thompson, Accounting Branch Chief, at (202) 551-3737, if you have questions regarding comments on the financial statements and related matters. Please contact Angie Kim, Staff Attorney, at (202) 551-3535, Catherine Brown, Staff Attorney, at (202) 551-3513 or me, at (202) 551-3720 with any other questions.

Sincerely,

/s/ Mara L. Ransom

Mara L. Ransom  
Assistant Director

cc: Laura Ozenberger  
Inergy, L.P.

Gillian Hobson  
Vinson & Elkins LLP