

Mail Stop 3561

April 12, 2010

Jason A. Dubchak  
General Counsel  
Niska Gas Storage Partners LLC  
2780 West Liberty Road  
Gridley, California 95948

**Re: Niska Gas Storage Partners LLC  
Amendment No. 1 to Registration Statement on Form S-1  
Filed March 29, 2010  
File No. 333-165007**

Dear Mr. Dubchak:

We have reviewed your response letter and amendment to your Form S-1 filed March 29, 2010. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments.

Amendment No. 1 to Registration Statement on Form S-1

General

1. We reissue comment four of our March 19, 2010 letter with respect to your statement on pages 1 and 119 that you contract for gas storage capacity “at cost-of-service based rates that are currently below market rates.” Please provide independent supplemental materials supporting this statement or characterize it as your belief. In this regard, we note that your March 29, 2010 response includes no independent support and refers to only one third party contract for storage and one contract you issued for storage space. In addition to providing independent supplemental support for the rates you cite for these two contracts, you should also provide us with support that these two contracts sufficiently represent the market.
2. We note your response to comment four of our March 19, 2010 letter. Please revise your statement on pages 1 and 119 that you “are the largest independent owner and operator of natural gas storage assets in North America”, and your

statement on page 125 that “AECO HUB is the largest natural gas storage provider in western Canada...” to clarify that this is based on your analysis of working gas capacity adjusted according to each comparative company’s percentage ownership of its respective storage facilities.

Prospectus Summary, page 1

3. We note your revisions to your prospectus summary in response to comment nine of our March 19, 2010 letter. Please further revise your Summary to limit your Summary to a brief overview of the key aspects of your filing and avoid repetitive disclosure. As examples only and not an exhaustive list, the second and third sentences of your Overview section on page 1 effectively provide identical information to that contained in the Our Assets section beginning on page 2. Your Business Strategies section beginning on page 3 and Competitive Strengths section beginning on page 4 remain duplicative of the information provided in your Business section beginning on page 119. See Item 503(a) of Regulation S-K.

Capitalization, page 44

4. Refer to footnote (2). Please revise to clarify why you are showing \$115,000 outstanding under your new revolving credit facility as further adjusted for the offering and application of the proceeds from the offering. You disclose in the footnote and on page 43, Use of Proceeds, that you will use proceeds such that no borrowings will be outstanding after the offering under your revolving credit facilities. We also note your disclosure in your unaudited pro forma combined financial statements beginning on page F-2 stating you expect to borrow \$115 million under the new revolving credit facility to repay the borrowings under the previous revolving credit facility. Refer to footnote (e) on page F-8. If you will use proceeds to repay borrowings under your revolving credit facilities only for the amount representing the distribution to Holdco, clarify that fact.

Unaudited Pro Forma Cash Available for Distribution, page 50

5. Please expand footnote (2) to disclose the amount of interest income and how the amount was derived.
6. We note your response to comment 25 of our letter dated March 19, 2010. Please revise your table to adjust for your capital expenditures. To the extent capital expenditures are offset with amounts borrowed, revise your estimated interest expense as appropriate to include the incremental cost of borrowing associated with financing your capital expenditures. If unaudited pro forma cash available for distribution reflects that you would not have been able to pay a distribution at the intended level based on historical amounts, disclose why you believe you would be able to pay the distribution going forward.

Estimated Cash Available for Distribution, page 55

7. We note your response to comment 27 of our letter dated March 19, 2010. Please revise your table to adjust for your capital expenditures. If you expect to finance your capital expenditures during the forecast period with borrowings, revise your estimated interest expense to include the incremental cost of borrowing and revise your disclosure as appropriate for the impact on your debt covenants.

Expected Non-Public Offerings of Senior Notes by Niska US and Niska Canada, page 90

8. We note your response to comment 33 of our letter dated March 19, 2010. Please revise footnote (5) on page 52 to disclose the amount under your indenture available for distributions to your unit holders.

Business, page 119

Our Operations, page 119

Customers and Counterparties, page 121

9. We reissue, in part, comment 10 of our March 19, 2010 letter. You state that you have provided the names of the two customers that accounted for approximately 43% of your gross revenue for the fiscal year ended March 31, 2008, but your disclosure on page 122 includes the name of only one customer, Natural Gas Exchange. The second customer is described as “a producer/marketer with an investment grade.” Please disclose the name of this customer. See Item 101(c)(viii) of Regulation S-K.

Competition, page 131

10. We note that in response to comment 11 of our March 19, 2010 letter you added a cross reference on page five to your Risk Factor and Business Disclosures. Please also revise your Business section so that your “Competitive Strengths” disclosure on page 123 immediately precedes or follows your “Competition” disclosure on page 131. Refer to Rule 421 of Regulation C under the Securities Act of 1933.

Directors and Executive Officers, page 139

11. We reissue comment 49 of our March 19, 2010 letter with respect to your discussion of Mr. Ward on page 140. Please identify Niska Holdings as your parent.

Jason A. Dubchak  
Niska Gas Storage Partners LLC  
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Unaudited Pro Forma Combined Financial Statements, page F-2

12. We note your revisions giving effect to the termination of your existing facility, the notes offering that closed on March 5, 2010 and your new revolving credit facilities. Please revise Note 2, Pro Forma Balance Sheet Adjustments, to clarify your consideration of the cost of terminating the interest rate swaps related to the termination of your existing facility referred to on page 47.

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

Please contact Robert Babula, Staff Accountant, at (202) 551-3339, or in his absence Donna Di Silvio, Senior Accountant, at (202) 551-3202 if you have questions regarding comments on the financial statements and related matters. You may contact Chris Chase, Staff Attorney, at (202) 551-3485 or me at (202) 551-3725 with any other questions.

Sincerely,

H. Christopher Owings  
Assistant Director

cc: John Johnston, Esq.  
Vinson & Elkins L.L.P.  
Via Fax (917) 849-5307