PLAINS ALL AMERICAN PIPELINE LP Form S-4 November 08, 2013

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As filed with the Securities and Exchange Commission on November 8, 2013

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Plains All American Pipeline, L.P.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

4610 (Primary Standard Industrial Classification Code Number) 333 Clay Street, Suite 1600 Houston, Texas 77002 (713) 646-4100 76-0582150 (IRS Employer Identification Number)

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Richard K. McGee Executive Vice President and General Counsel 333 Clay Street, Suite 1600 Houston, Texas 77002 (713) 646-4100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Alan Beck Sarah K. Morgan Vinson & Elkins L.L.P. First City Tower Srinivas M. Raju Richards Layton & Finger, P.A. One Rodney Square 920 North King Street

1001 Fannin Street, Suite 2500

Houston, Texas 77002-6760 713-758-2222 Wilmington, Delaware 19801 302-651-7748

Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable after this registration statement becomes effective and upon consummation of the merger described in the enclosed proxy statement/prospectus.

If the securities being registered on this Form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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 Exchange Act.

Large accelerated filer ý Accelerated filer o Non-accelerated filer o Smaller reporting company (Do not check if a o smaller reporting company)

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) o

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) o

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per unit	Proposed maximum aggregate offering price(2)	Amount of registration fee(3)
Common units	14,686,412	Not applicable	\$744,221,551.15	\$95,855.74

(1)

Represents the estimated maximum number of common units of the Registrant to be issued in the merger described herein to holders of common units of PAA Natural Gas Storage, L.P. ("PNG") other than the Registrant, which will continue to own PNG common units following the effective time of the merger.

(2)

Estimated solely for the purposes of calculating the registration fee required by Section 6(b) of the Securities Act and calculated pursuant to Rules 457(f)(1) and 457(c) under the Securities Act. The proposed maximum aggregate offering price of the Registrant's common units was calculated based upon the market value of the PNG common units to be converted in the merger in accordance with Rule 457(c) under the Securities Act as follows: the product of (a) \$22.55 (the average of the high and low prices per PNG common unit on November 4, 2013, as quoted on the New York Stock Exchange), multiplied by (b) 33,003,173, (the number of PNG common units outstanding as of October 31, 2013, that are eligible for conversion into PAA common units pursuant to the merger agreement).

(3)

Determined in accordance with Section 6(b) of the Securities Act at a rate equal to \$128.80 per \$1,000,000 of the proposed maximum aggregate offering price (pro rated for amounts less than \$1,000,000).

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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PRELIMINARY PROXY STATEMENT/PROSPECTUS SUBJECT TO COMPLETION DATED NOVEMBER 8, 2013

The information in this preliminary proxy statement/prospectus is not complete and may be changed. Plains All American Pipeline, L.P. may not distribute or issue the securities being registered pursuant to this registration statement until the registration statement, as filed with the Securities and Exchange Commission (of which this preliminary proxy statement/prospectus is a part), is effective. This preliminary proxy statement/prospectus is not an offer to sell nor should it be considered a solicitation of an offer to buy the securities described herein in any state where the offer or sale is not permitted.

MERGER PROPOSAL YOUR VOTE IS VERY IMPORTANT

On October 21, 2013, Plains All American Pipeline, L.P. ("PAA"), PAA Acquisition Company LLC ("MergerCo"), a wholly-owned subsidiary of PAA, PAA Natural Gas Storage, L.P. ("PNG") and PNGS GP LLC ("PNG GP"), a wholly-owned subsidiary of PAA and the general partner of PNG, entered into a merger agreement (as such agreement may be amended from time to time, the "merger agreement"). Pursuant to the merger agreement, MergerCo will merge with and into PNG (the "merger"), with PNG surviving the merger as a wholly-owned subsidiary of PAA, and all common units representing limited partner interests in PNG ("PNG common units") issued and outstanding immediately prior to the effective time of the merger and not owned by PAA or any of its subsidiaries will be converted into the right to receive common units representing limited partner interests in PAA ("PAA common units") based on an exchange ratio of 0.445 PAA common units per PNG common unit. No fractional PAA common units will be issued in the merger. PNG common unitholders will receive cash in lieu of receiving any fractional PAA common units to which any PNG common unitholder would otherwise have been entitled. PAA unitholders will continue to own their existing PAA common units.

Based on the estimated number of PAA common units and the estimated number of PNG common units that will be outstanding immediately before the closing of the merger (other than PNG common units owned by PAA or any of its subsidiaries), we estimate that, upon the closing, the number of PAA common units issued in exchange for PNG common units will represent approximately 4.1% of PAA common units outstanding.

The merger agreement requires that, prior to the closing date, the merger agreement and the transactions contemplated thereby (the "merger transactions") be approved by the affirmative vote of PNG unitholders, as of the record date for the PNG special meeting, holding a majority of the outstanding PNG common units, voting as a class, and the holders of a majority of the outstanding PNG subordinated units, voting as a class. PNG will hold a special meeting of its common unitholders in connection with the proposed merger. At the special meeting of PNG common unitholders, will be asked to vote on the proposal to approve the merger agreement and the merger transactions, including the merger (the "merger proposal"). The merger proposal will be approved by the requisite vote of the PNG common unitholders if the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units out in favor of the merger proposal at the PNG special meeting. Pursuant to the merger agreement, PAA has agreed to vote the PNG common units and the PNG subordinated units owned beneficially or of record by it or any of its subsidiaries in favor of the merger agreement and the merger transactions, including the 28,155,526 PNG common units currently held by PAA and the 25,434,351 PNG subordinated units currently held by PAA, which units represent approximately 46% of the outstanding PNG common units and 100% of the outstanding PNG subordinated units, respectively. It is anticipated that PAA, as the holder of all of the PNG subordinated units, will execute a written consent approving the merger agreement and the merger agreement and the merger agreement and the merger transactions on the date of the special meeting of PNG common unitholders, which consent will satisfy the voting requirement with respect to the holders of the PNG subordinated units.

The conflicts committee (the "PNG Conflicts Committee") of the PNG GP board of directors (the "PNG GP Board") approved and declared the advisability of entering into the merger agreement and the merger transactions and determined that the merger agreement and the merger transactions are fair and reasonable to and in, or not opposed to, the best interest of, PNG and the holders of PNG common units who are unaffiliated with PAA and its subsidiaries and affiliates (the "PNG unaffiliated unitholders"). The PNG Conflicts Committee's determination that the merger agreement and the merger transactions are fair and reasonable to PNG constitutes "Special Approval," as such term is defined by the PNG partnership agreement. The PNG Conflicts Committee has caused PNG GP to approve the merger agreement and the merger transactions and directed that the merger agreement and the merger transactions be submitted to the PNG common unitholders at the PNG special meeting for approval. The PNG Conflicts Committee recommends that the PNG common unitholders vote in favor of the merger proposal.

This proxy statement/prospectus provides you with detailed information about the merger agreement, the proposed merger and related matters. We encourage you to read the entire document carefully. In particular, please read "Risk Factors" beginning on page 22 of this proxy statement/prospectus for a discussion of risks related to the merger, PNG's business and common units if the merger does not occur and United States federal income tax consequences of the merger.

PAA's common units are listed on the New York Stock Exchange ("NYSE") under the symbol "PAA," and PNG's common units are listed on the NYSE under the symbol "PNG." The last reported sale price of PAA's common units on the NYSE on , 2013, was \$. The last reported sale price of PNG's common units on the NYSE on , 2013, was \$.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued under this proxy statement/prospectus or has determined if this proxy statement/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

All information in this proxy statement/prospectus concerning PAA has been furnished by PAA. All information in this proxy statement/prospectus concerning PNG has been furnished by PNG.

This proxy statement/prospectus is dated about , 2013.

, 2013, and is being first mailed to PNG common unitholders on or

On behalf of the PNG Conflicts Committee,

Arthur L. Smith Chairman of the Conflicts Committee of the Board of Directors of PNGS GP LLC

Houston, Texas , 2013

Notice of Special Meeting of Unitholders

To the Unitholders of PAA Natural Gas Storage, L.P.:

A special meeting of common unitholders of PAA Natural Gas Storage, L.P. ("PNG") will be held on , 2013 at , local time, at , for the following purposes:

To consider and vote on a proposal to approve the Agreement and Plan of Merger dated as of October 21, 2013, by and among Plains All American Pipeline, L.P. ("PAA"), PAA Acquisition Company LLC ("MergerCo"), a wholly-owned subsidiary of PAA, PNG and PNGS GP LLC ("PNG GP"), a wholly-owned subsidiary of PAA and the general partner of PNG, as it may be amended from time to time (the "merger agreement"), and the transactions contemplated thereby (the "merger transactions"), including the merger (the "merger proposal"); and

To consider and vote on a proposal by PNG GP to adjourn the PNG special meeting for any reason (the "adjournment proposal").

PNG will transact no other business at the special meeting except such business as may properly be brought before the special meeting or any adjournments or postponements thereof. At this time, PNG knows of no other matters that will be presented for the consideration of its common unitholders at the special meeting.

The merger proposal will be approved by the requisite vote of the PNG common unitholders if the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units vote in favor of the merger proposal. Failures to vote and abstentions will have the same effect as a vote against the merger proposal. Pursuant to the merger agreement, PAA has agreed to vote the PNG common units and PNG subordinated units owned beneficially or of record by it or any of its subsidiaries in favor of the approval of the merger agreement and the merger transactions, including the 28,155,526 PNG common units currently held by PAA and the 25,434,351 PNG subordinated units currently held by PAA, which units represent approximately 46% of the outstanding PNG common units and 100% of the outstanding PNG subordinated units, respectively. It is anticipated that PAA, as the holder of all of the PNG subordinated units, will execute a written consent approving the merger agreement and the merger transactions on the date of the special meeting of PNG common unitholders, which consent will satisfy the voting requirement with respect to the holders of the PNG subordinated units.

The conflicts committee (the "PNG Conflicts Committee") of the PNG GP board of directors (the "PNG GP Board") approved and declared the advisability of entering into the merger agreement and the merger transactions and determined that the merger agreement and the merger transactions are fair and reasonable to and in, or not opposed to, the best interest of, PNG and the holders of PNG common units who are unaffiliated with PAA and its subsidiaries and affiliates (the "PNG unaffiliated unitholders"). The PNG Conflicts Committee's determination that the merger agreement and the merger transactions are fair and reasonable to PNG constitutes "Special Approval," as such term is defined by the PNG partnership agreement. The PNG Conflicts Committee has caused PNG GP to approve the merger agreement and the merger transactions and directed that the merger agreement and the merger transactions be submitted to the PNG common unitholders at the PNG special meeting for approval. The PNG Conflicts Committee recommends that the PNG common unitholders vote in favor of the merger proposal.

Only PNG common unitholders of record as of the close of business on meeting and any adjournments of the special meeting. A

, 2013, are entitled to notice of and to vote at the special

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list of PNG common unitholders entitled to vote at the special meeting will be available for inspection at PNG's offices in Houston, Texas, for any purpose relevant to the special meeting during normal business hours for a period of ten days before the special meeting and at the special meeting.

YOUR VOTE IS IMPORTANT. WHETHER OR NOT YOU EXPECT TO ATTEND THE SPECIAL MEETING, PLEASE CAUSE YOUR UNITS TO BE VOTED IN ONE OF THE FOLLOWING WAYS:

If you hold your units in the name of a bank, broker or other nominee, you should follow the instructions provided by your bank, broker or nominee to provide voting instructions for your PNG common units.

If you hold your units in your own name, you may submit a proxy for your units by:

using the toll-free telephone number shown on the proxy card;

using the internet website shown on the proxy card; or

marking, signing, dating and promptly returning the enclosed proxy card in the postage-paid envelope, which requires no postage if mailed in the United States.

The enclosed proxy statement/prospectus provides a detailed description of the merger and the merger agreement as well as a description of the issuance of PAA common units to PNG common unitholders pursuant to the merger agreement. We urge you to read this proxy statement/prospectus, including any documents incorporated by reference and the Annexes, carefully and in its entirety. If you have any questions concerning the merger or this proxy statement/prospectus, would like additional copies, or need help voting your PNG common units, please contact PNG's proxy solicitor, Georgeson Inc., toll-free at 1-888-666-2594.

By order of the Conflicts Committee of PNGS GP LLC, as the general partner of PAA Natural Gas Storage, L.P.,

Greg L. Armstrong Chairman of the Board and Chief Executive Officer PNGS GP LLC

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IMPORTANT NOTE ABOUT THIS PROXY STATEMENT/PROSPECTUS

This proxy statement/prospectus, which forms part of a registration statement on Form S-4 filed with the Securities and Exchange Commission (the "SEC"), constitutes a proxy statement of PNG under the Securities Exchange Act of 1934 (the "Exchange Act") with respect to the solicitation of proxies for the special meeting of PNG common unitholders to, among other things, approve the merger proposal. This proxy statement/prospectus is also a prospectus of PAA under the Securities Act of 1933 (the "Securities Act") for PAA common units that will be issued to PNG common unitholders in the merger pursuant to the merger agreement.

As permitted under the rules of the SEC, this proxy statement/prospectus incorporates by reference important business and financial information about PAA and PNG from other documents filed with the SEC that are not included in or delivered with this proxy statement/prospectus. Please read "Where You Can Find More Information" beginning on page 139. You can obtain any of the documents incorporated by reference into this proxy statement/prospectus from the SEC's website at *www.sec.gov*. This information is also available to you without charge upon your request in writing or by telephone from PAA and PNG at the following address and telephone number:

Plains All American Pipeline, L.P.
PAA Natural Gas Storage, L.P.
333 Clay Street, Suite 1500
Houston, Texas 77002
Attention: Investor Relations
Telephone: (713) 646-4222

Please note that copies of the documents provided to you will not include exhibits, unless the exhibits are specifically incorporated by reference into those documents or this proxy statement/prospectus.

You may obtain certain of these documents at PAA's website, *www.paalp.com*, by selecting "Investor Relations" and then selecting "SEC Filings," and at PNG's website, *www.pnglp.com*, by selecting "Investor Relations" and then selecting "SEC Filings." Information contained on PAA's or PNG's website is expressly not incorporated by reference into this proxy statement/prospectus.

In order to receive timely delivery of requested documents in advance of the PNG special meeting, your request should be received no later than , 2013. If you request any documents, PAA or PNG will mail them to you by first class mail or another equally prompt means within one business day after receipt of your request.

PAA and PNG have not authorized anyone to give any information or make any representation about the merger, PAA or PNG that is different from, or in addition to, the information contained in this proxy statement/prospectus or in any of the materials that have been incorporated by reference into this proxy statement/prospectus. Therefore, if anyone distributes any such information, you should not rely on it. If you are in a jurisdiction where offers to exchange or sell or solicitations of offers to exchange or purchase the securities offered by this proxy statement/prospectus or the solicitation of proxies is unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this proxy statement/prospectus does not extend to you. The information contained in this proxy statement/prospectus speaks only as of the date of this proxy statement/prospectus or, in the case of information in a document incorporated by reference, as of the date of such document, unless the information specifically indicates that another date applies. All information in this proxy statement/prospectus concerning PAA has been furnished by PAA. All information in this proxy statement/prospectus concerning PNG has been furnished by PNG.

PROXY STATEMENT/PROSPECTUS

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DEFINITIONS

The following terms have the meanings set forth below for purposes of this proxy statement/prospectus, unless the context otherwise indicates:

"adjournment proposal" means the proposal by PNG GP to adjourn the PNG special meeting for any reason.

"Evercore" means Evercore Group L.L.C., financial advisor to the PNG Conflicts Committee.

"Exchange Act" means the Securities Exchange Act of 1934.

"exchange ratio" means 0.445 PAA common units per PNG common unit to be converted in the merger, the consideration for the merger.

"GAAP" means accounting principles that are generally accepted in the United States of America.

"merger" means, as contemplated by the merger agreement, the proposed merger of MergerCo with and into PNG, with PNG surviving the merger as a wholly-owned subsidiary of PAA, and all PNG common units outstanding at the effective time of the merger and not owned by PAA or any of its subsidiaries being converted into the right to receive 0.445 PAA common units per PNG common unit.

"merger agreement" means that certain Agreement and Plan of Merger dated as of October 21, 2013, by and among PAA, MergerCo, PNG and PNG GP, as it may be amended from time to time, according to which the parties thereto have agreed to consummate the merger transactions.

"merger proposal" means the proposal to approve the merger agreement and the merger transactions, to be considered for a vote of the PNG common unitholders at the PNG special meeting.

"merger transactions" means the transactions contemplated by the merger agreement, including the merger.

"MergerCo" means PAA Acquisition Company LLC, a wholly-owned subsidiary of PAA.

"NGL" means natural gas liquid, including ethane and natural gasoline products as well as propane and butane, products which are also commonly referred to as liquefied petroleum gas.

"NYSE" means the New York Stock Exchange.

"PAA" means Plains All American Pipeline, L.P.

"PAA common units" or "PAA's common units" means the common units of PAA representing limited partner interests in PAA having the rights and obligations specified with respect to "Common Units" as set forth in PAA's partnership

agreement.

"PAA GP" means Plains All American GP LLC, a Delaware limited liability company and the general partner of Plains AAP, L.P., a Delaware limited partnership and the sole member of PAA GP LLC, a Delaware limited liability company and the general partner of PAA.

"PAA GP Board" means the board of directors of PAA GP.

"PAA officers" or "officers of PAA" means the officers of PAA GP.

"PAA's partnership agreement" or the "PAA partnership agreement" means the Fourth Amended and Restated Agreement of Limited Partnership of PAA, dated as of May 17, 2012, as

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amended by that certain Amendment No. 1, dated as of October 1, 2012, and as further amended from time to time.

"PNG" means PAA Natural Gas Storage, L.P.

"PNG common unitholders" means the holders of PNG common units.

"PNG common units" or "PNG's common units" means the common units of PNG representing limited partner interests in PNG having the rights and obligations specified with respect to "Common Units" as set forth in PNG's partnership agreement.

"PNG Conflicts Committee" means the conflicts committee of the PNG GP Board.

"PNG IDRs" mean the limited partner interests in PNG having the rights and obligations specified with respect to "Incentive Distribution Rights" in PNG's partnership agreement.

"PNG GP" means PNGS GP LLC, the general partner of PNG and a wholly-owned subsidiary of PAA.

"PNG GP Board" means the board of directors of PNG GP.

"PNG's partnership agreement" or the "PNG partnership agreement" means the Second Amended and Restated Agreement of Limited Partnership of PNG dated as of August 16, 2010, as amended from time to time.

"PNG Series A Subordinated Units" means the limited partner interests in PNG having the rights and obligations specified with respect to "Series A Subordinated Units" in PNG's partnership agreement.

"PNG Series B Subordinated Units" means the limited partner interests in PNG having the rights and obligations specified with respect to "Series B Subordinated Units" in PNG's partnership agreement.

"PNG special meeting" or "special meeting" means the special meeting of PNG common unitholders described in this proxy statement/prospectus at which the PNG common unitholders will vote on the merger proposal.

"PNG subordinated units" means the PNG Series A Subordinated Units and the PNG Series B Subordinated Units.

"PNG unaffiliated unitholders" means the PNG common unitholders other than PAA and its subsidiaries and other affiliates (as such term is defined in Rule 405 of the Securities Act).

"PNG unitholder approval" means approval of the merger transactions by the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units, voting as a class, and a majority of the outstanding PNG subordinated units, voting as a class.

"Richards Layton" means the law firm of Richards, Layton & Finger, P.A., counsel to the PNG Conflicts Committee.

"SEC" means the United States Securities and Exchange Commission.

"Securities Act" means the Securities Act of 1933.

"U.S." means the United States.

"Vinson & Elkins" means the law firm of Vinson & Elkins L.L.P., counsel to PAA.

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QUESTIONS AND ANSWERS ABOUT THE MERGER AND THE PNG SPECIAL MEETING

Important Information and Risks. The following are brief answers to some questions that you may have regarding the merger proposal being considered at the PNG special meeting. You should read and consider carefully the remainder of this proxy statement/prospectus, including the "Risk Factors" beginning on page 22 and the attached Annexes, because the information in this section does not provide all of the information that might be important to you. Additional important information and risk factors are also contained in the documents incorporated by reference into this proxy statement/prospectus. Please read "Where You Can Find More Information" beginning on page 139.

Q: What is the proposed transaction?

A:

PAA and PNG have agreed that PAA will acquire PNG by merging MergerCo, a wholly-owned subsidiary of PAA, with and into PNG, with PNG surviving the merger, under the terms of the merger agreement that is described in this proxy statement/prospectus and attached as Annex A to this proxy statement/prospectus. As a result of the merger, each outstanding PNG common unit, other than those owned by PAA or any of its subsidiaries, will be converted into the right to receive 0.445 PAA common units. The PNG common units and the PNG subordinated units owned by PAA or its subsidiaries will not be converted in the merger and will remain outstanding as the only limited partner interests in PNG following the merger. The general partner interest in PNG and the PNG IDRs owned by PNG GP will remain outstanding, and PNG GP will continue as the general partner of PNG.

The merger will become effective on the date and at the time that the certificate of merger is filed with the Secretary of State of the State of Delaware, or a later date and time if set forth in the certificate of merger. Throughout this proxy statement/prospectus, this is referred to as the "effective time" of the merger.

Q: Why am I receiving these materials?

A:

The proposed merger cannot be completed without the approval of PNG unitholders, as of the record date of the PNG special meeting, holding a majority of the outstanding PNG common units, voting as a class, and the holders of a majority of the outstanding PNG subordinated units, voting as a class. PNG is holding a special meeting of its common unitholders to approve the merger proposal and this proxy statement/prospectus contains important information about the proposed merger and the merger agreement. You should carefully read this proxy statement/prospectus, including any documents incorporated by reference and the Annexes, in its entirety before voting on the merger proposal.

Q: Why are PAA and PNG proposing the merger?

A:

PAA and PNG believe that the merger will benefit both PAA and PNG because PAA will, relative to PNG remaining as a stand alone public entity, be able to more effectively manage PNG's business during the next several years, during which it is anticipated that overall market conditions for natural gas storage will remain depressed and perhaps deteriorate further. It is likely that such market conditions will adversely impact PNG's cash flow, which, absent the merger, would in turn impact PNG's ability to maintain its distribution levels, borrowing capacity and debt covenant compliance. Due to PAA's stronger balance sheet, the merger will enable PNG to more effectively fund its capital expenditures during the next several years and continue pursuing acquisition opportunities. The merger will also allow PNG common unitholders to receive an exchange ratio of 0.445 PAA common units for each publicly held common unit of PNG, which represents a premium of 8.5% above the closing price of PNG common units on August 27, 2013 based on the closing price of PAA common units on that same day (the last trading day before PAA announced its proposal to acquire all PNG common units owned by the public).



Q: What will happen to PNG as a result of the merger?

A:

As a result of the merger, MergerCo will merge with and into PNG, and PNG will survive as a wholly-owned subsidiary of PAA.

Q: What will PNG common unitholders receive in the merger?

A:

If the merger is completed, PNG common unitholders, other than PAA and its subsidiaries, will be entitled to receive 0.445 PAA common units in exchange for each PNG common unit owned. The exchange ratio is fixed and will not be adjusted on account of any change in price of either PAA common units or PNG common units prior to completion of the merger. If the exchange ratio would result in a PNG common unitholder's being entitled to receive a fraction of a PAA common unit, that PNG common unitholder will not receive any fractional PAA common units. PNG common unitholders will receive cash in lieu of receiving any fractional PAA common units to which any PNG common unitholder would otherwise have been entitled in an amount equal to such fractional interest multiplied by the average of the closing price of PAA common units for the ten consecutive NYSE full trading days ending at the closing of the last NYSE full trading day immediately preceding the day the merger closes. For additional information regarding exchange procedures, please read "The Merger Agreement Exchange of Certificates; No Fractional Units."

Q: Where will PAA common units and PNG common units trade after the merger?

A:

PAA common units will continue to trade on the NYSE under the symbol "PAA." PNG common units will no longer be publicly traded.

Q: What will PAA common unitholders receive in the merger?

A:

PAA common unitholders will simply retain the PAA common units they currently own. They will not receive any additional PAA common units or any other consideration in the merger.

Q: What will happen to future distributions on my PNG common units?

A:

Prior to the termination of the merger agreement or the effective time of the merger, it is expected that PNG common unitholders will continue to receive regular quarterly distributions on their PNG common units consistent with past practice, provided that the record date for such quarterly distribution occurs prior to the effective time of the merger. If the merger agreement terminates, and current market conditions persist as it is assumed through 2016, PNG would experience meaningful degradation of its earnings and distributable cash flow through 2018 relative to forecasted levels for 2013. This may, in turn, force PNG to issue additional equity, borrow additional money or reduce its distribution levels.

Once the merger is completed and PNG common units are exchanged for PAA common units, when distributions are approved and declared by PAA GP and paid by PAA, former PNG common unitholders will receive distributions on PAA common units they receive in the merger in accordance with PAA's partnership agreement to the extent such unitholders continue to hold such PAA common units as of the applicable record date for such distribution. Assuming that the merger closes during December 2013, PNG common unitholders will receive distributions on PAA common units they receive in the merger for the quarter ended September 30, 2013, and will receive distributions on PAA common units they receive in the merger for the quarter ended December 31, 2013 to be declared and paid during the first quarter of 2014 to the extent such unitholders continue to hold such PAA common units as of the applicable record date for such distributions from both PNG and PAA for the same quarter. For additional information, please read "Summary Market Prices and Distribution Information."

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Current PAA common unitholders will continue to receive distributions on their common units in accordance with PAA's partnership agreement. For a description of the distribution provisions of PAA's partnership agreement, please read "Comparison of the Rights of PAA Unitholders and PNG Unitholders."

The current annualized distribution rate per PNG common unit is \$1.43 (based on the quarterly distribution rate of \$0.3575 per PNG common unit paid on November 14, 2013 with respect to the third quarter of 2013). Based on the exchange ratio, the annualized distribution rate for each PNG common unit exchanged for 0.445 PAA common units would be approximately \$1.07 (based on the quarterly distribution rate of \$0.60 per PAA common unit paid on November 14, 2013 with respect to the third quarter of 2013). Accordingly, based on current distribution rates and the 0.445x exchange ratio, a PNG common unitholder would initially receive approximately 25.2% less in quarterly cash distributions on an annualized basis after giving effect to the merger. For additional information, please read "Summary Comparative Per Unit Information" and "Summary Market Prices and Distribution Information." In connection with the closing of the merger, the owners of PAA's general partner have agreed to reduce their incentive distribution rights under PAA's partnership agreement by \$12 million in each of 2014 and 2015, \$10 million in 2016 and \$5 million per year thereafter.

Q: When and where will the PNG special meeting be held?

A:

The special meeting of PNG common unitholders will be held at , on , 2013, at , local time.

Q: Who is entitled to vote at the PNG special meeting?

A:

The record date for the PNG special meeting is , 2013. Only PNG common unitholders of record as of the close of business on the record date are entitled to notice of, and to vote at, the PNG special meeting or any adjournment of the PNG special meeting.

Q: What is the vote required to approve the merger proposal and the adjournment proposal?

A:

The merger proposal will be approved if the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units vote in favor of the merger proposal at the PNG special meeting, and the holders of a majority of the outstanding PNG subordinated units vote in favor of the merger agreement and the merger transactions. Failures to vote and abstentions will have the same effect as a vote against the merger proposal. Pursuant to the merger agreement, PAA has agreed to vote the PNG common units and PNG subordinated units owned beneficially or of record by it or any of its subsidiaries in favor of the merger agreement and the merger transactions, including the 28,155,526 PNG common units currently held by PAA and the 25,434,351 PNG subordinated units currently held by PAA, which units represent approximately 46% of the outstanding PNG common units and 100% of the outstanding PNG subordinated units, respectively. It is anticipated that PAA, as the holder of all of the PNG subordinated units, will execute a written consent approving the merger agreement and the merger transactions on the date of the special meeting of PNG common unitholders, which consent will satisfy the voting requirement with respect to the holders of the PNG subordinated units.

The adjournment proposal will be approved if the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units present in person or represented by proxy and entitled to vote at such meeting vote in favor of the adjournment proposal at the PNG special meeting. Abstentions will have the same effect as a vote against this proposal.

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Q. What constitutes a quorum at the PNG special meeting?

A:

The presence in person or by proxy at the PNG special meeting of the holders of a majority of PNG's outstanding common units on the record date will constitute a quorum and will permit PNG to conduct the proposed business at the special meeting. Units held in your name will be counted as present at the special meeting if you:

are present in person at the meeting; or

have submitted a properly executed proxy card or properly submitted your proxy by telephone or internet.

Proxies received but marked as abstentions will be counted as units that are present and entitled to vote for purposes of determining the presence of a quorum. Because the only proposals for consideration at the PNG special meeting are non-discretionary proposals, there will not be any broker non-votes at the PNG special meeting.

Q: How do I vote my PNG common units if I hold my units in my own name?

A:

After you have read this proxy statement/prospectus carefully, please respond by completing, signing and dating your proxy card and returning it in the enclosed postage-paid envelope, or by submitting your proxy by telephone or through the internet as soon as possible in accordance with the instructions provided under "The PNG Special Meeting Voting Procedures" beginning on page 29.

Q: If my PNG common units are held in "street name" by my broker or other nominee, will my broker or other nominee vote my units for me?

A:

Not unless you tell them how to vote. Absent specific instructions from you, your broker is not allowed to vote your PNG common units on any of the proposals. To instruct your broker or other nominee how to vote, you should follow the directions that your broker or other nominee provides to you.

Please note that you may not vote your PNG common units held in "street name" by returning a proxy card directly to PNG or by voting in person at the PNG special meeting unless you provide a "legal proxy," which you must obtain from your broker or other nominee. If you do not instruct your broker or other nominee on how to vote your PNG common units, your broker or other nominee may not vote your PNG common units, which will have the same effect as a vote against the approval of the merger proposal. You should therefore provide your broker or other nominee with instructions as to how to vote your PNG common units.

Q: When do you expect the merger to be completed?

A:

A number of conditions must be satisfied before PAA and PNG can complete the merger, including the approval of the merger proposal by the PNG common unitholders. For more information about these conditions, please read "The Merger Agreement Conditions to the Merger." Although PAA and PNG cannot be sure when all of the conditions to the merger will be satisfied, PAA and PNG expect to complete the merger as soon as practicable following the PNG special meeting.

Q: How does the PNG Conflicts Committee recommend that the PNG common unitholders vote?

A:

The PNG Conflicts Committee recommends that PNG common unitholders vote FOR the merger proposal.

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On October 21, 2013, the PNG Conflicts Committee approved and declared the advisability of entering into the merger agreement and the merger transactions and determined that the merger agreement and the merger transactions are fair and reasonable to and in, or not opposed to, the best interest of, PNG and the PNG unaffiliated unitholders. The PNG Conflicts Committee's determination that the merger agreement and the merger transactions are fair and reasonable to PNG constitutes "Special Approval," as such term is defined by the PNG partnership agreement. The PNG Conflicts Committee has caused PNG GP to approve the merger agreement and the merger transactions and directed that the merger agreement and the merger transactions be submitted to the PNG common unitholders at the PNG special meeting for approval. The PNG Conflicts Committee recommends that the PNG common unitholders vote in favor of the merger proposal.

Q: What are the expected U.S. federal income tax consequences to a PNG common unitholder as a result of the transactions contemplated by the merger agreement?

A:

It is anticipated that no gain or loss will be recognized by the holders of PNG common units as a result of the merger, other than gain resulting from either (i) any decrease in partnership liabilities pursuant to Section 752 of the Internal Revenue Code, or (ii) any cash paid in lieu of fractional PAA common units.

Please read "Risk Factors Tax Risks Related to the Merger" and "Material U.S. Federal Income Tax Consequences of the Merger."

Q: What are the expected U.S. federal income tax consequences for a PNG common unitholder of the ownership of PAA common units after the merger is completed?

A:

Each PNG common unitholder who becomes a PAA common unitholder as a result of the merger will, as is the case for existing PAA common unitholders, be allocated such unitholder's distributive share of PAA's income, gains, losses, deductions and credits. In addition to U.S. federal income taxes, such a holder will be subject to other taxes, including state and local income taxes, unincorporated business taxes, and estate, inheritance or intangibles taxes that may be imposed by the various jurisdictions in which PAA conducts business or owns property or in which the unitholder is resident. Please read "Material U.S. Federal Income Tax Consequences of Ownership of PAA Common Units."

Q: Assuming the merger closes before December 31, 2013, how many Schedule K-1s will I receive if I am a PNG common unitholder?

A:

You will receive one Schedule K-1 from PNG, which will describe your share of PNG's income, gain, loss and deduction for the portion of the tax year that you held PNG common units prior to the effective time of the merger. You will receive one Schedule K-1 from PAA, which will describe your share of PAA's income, gain, loss and deduction for the portion of the tax year that you hold PAA common units following the effective time of the merger. If the merger is completed on December 31, 2013, you will receive only one Schedule K-1 for the tax year ended December 31, 2013 relating solely to your interest in PNG.

Q: Are PNG common unitholders entitled to appraisal rights?

A:

No. PNG common unitholders are not entitled to appraisal rights under Delaware or other applicable law or contractual appraisal rights under PNG's partnership agreement or the merger agreement.

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Q: What if I do not vote?

A:

If you do not vote in person or by proxy or if you abstain from voting, it will have the same effect as a vote against the merger proposal. If you are a record holder and you sign and return your proxy card but do not indicate how you want to vote, your proxy will be counted as a vote in favor of the merger proposal and the adjournment proposal.

Q: If I am planning to attend the PNG special meeting in person, should I still submit my proxy?

A:

Yes. Whether or not you plan to attend the PNG special meeting, you should submit a proxy. Your PNG common units will not be voted if you do not submit your proxy or do not vote in person at the PNG special meeting.

Q: Can I revoke or change my vote after I have submitted my proxy?

A:

Yes. If you own your units in your own name, you may revoke or change your proxy at any time prior to its exercise by:

giving written notice of revocation to the secretary of PNG GP at or before the PNG special meeting;

appearing and actually voting in person at the PNG special meeting;

timely submitting a later-dated proxy by telephone or internet no later than 5:00 p.m. Houston, Texas time on the day before the date of the PNG special meeting; or

properly completing and executing a later-dated proxy and delivering it to the secretary of PNG GP at or before the PNG special meeting.

Your presence without voting at the PNG special meeting will not automatically revoke your proxy. Beneficial holders who hold their PNG common units in "street name" by a broker or other nominee may revoke their proxy by following the instructions provided by such broker or nominee.

Q: What should I do if I receive more than one set of voting materials for the PNG special meeting?

A:

You may receive more than one set of voting materials for the PNG special meeting, and the materials may include multiple proxy cards or voting instruction cards. For example, you will receive a separate voting instruction card for each brokerage account in which you hold units. Additionally, if you are a holder of record registered in more than one name, you will receive more than one proxy card. Please complete, sign, date and return each proxy card and voting instruction card that you receive according to the instructions on it.

Q: If I am a holder of PNG common units represented by a unit certificate, should I send in my certificate representing PNG common units now?

A:

No. Please do not send in your certificates representing PNG common units with your proxy card. After the merger is completed, PNG common unitholders who hold their units in certificated form will receive written instructions for exchanging their certificates representing PNG common units. If you own PNG common units in "street name," you will need to follow the instructions provided by your broker or other nominee before the merger consideration will be credited to your account by your broker or other nominee following the closing of the merger.

Q: What will happen to PNG if the merger does not occur?

A:

If the merger does not occur, PNG expects that it will continue to operate its business; however, based on currently available information, PAA believes that it is clear that the next several years will be challenging for PNG on a stand-alone basis. If current market conditions persist as it is assumed through 2016, PNG would experience meaningful degradation of its earnings and distributable cash flow through 2018 relative to forecasted levels for 2013, which in turn would negatively impact PNG's ability to maintain its distribution levels, borrowing capacity and debt covenant compliance or its ability to make acquisitions or engage in organic growth projects. See "Risk Factors Risks Related to PNG's Business and Common Units if the Merger Does Not Occur."

Q: Who do I call if I have further questions about voting, the PNG special meeting or the merger?

A:

PNG common unitholders who have questions about the merger, including the procedures for voting their PNG common units, or who desire additional copies of this proxy statement/prospectus or additional proxy cards, should contact PNG's proxy solicitor, Georgeson Inc., toll-free at 1-888-666-2594.

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SUMMARY

This summary highlights some of the information in this proxy statement/prospectus. It may not contain all of the information that is important to you. To understand the merger fully and for a more complete description of the terms of the merger agreement, you should read carefully this proxy statement/prospectus, the documents incorporated by reference and the Annexes to this proxy statement/prospectus, including the full text of the merger agreement included as Annex A. Please also read "Where You Can Find More Information" on page 139.

The Merger Parties' Businesses

Plains All American Pipeline, L.P.

PAA is a Delaware limited partnership formed in 1998. PAA engages in the transportation, storage, terminalling and marketing of crude oil and refined products, as well as in the processing, transportation, fractionation, storage and marketing of NGLs. PAA's operations are conducted directly and indirectly through, and its operating assets are owned by, its primary operating subsidiaries. PAA GP has ultimate responsibility for conducting PAA's business and managing its operations.

PAA's assets include approximately 18,800 miles of pipelines, approximately 119 million barrels of storage capacity, and a significant fleet of trucks, trailers, tugs, barges and railcars. Through its transportation, storage and commercial activities, on an average daily basis, PAA transports in excess of 3.5 million barrels of crude oil and NGLs on its pipelines.

PAA's principal business strategy is to provide competitive and efficient midstream transportation, terminalling, storage, processing, fractionation and supply and logistics services to its producer, refiner and other customers. Toward this end, PAA endeavors to address regional supply and demand imbalances for crude oil, NGL, natural gas and refined products in the United States and Canada by combining the strategic location and capabilities of its transportation, terminalling, storage, processing and fractionation assets with its extensive supply, logistics and distribution expertise.

For the year ended December 31, 2012, PAA had net income attributable to PAA of \$1.1 billion, or \$2.40 per diluted common unit, and revenues of \$37.8 billion. For the nine months ended September 30, 2013, PAA had net income attributable to PAA of \$1.1 billion, or \$2.22 per diluted common unit, and revenues of \$31.6 billion.

PAA's executive offices are located at 333 Clay Street, Suite 1600, Houston, Texas 77002. PAA's telephone number is (713) 646-4100, and its internet website address is *www.paalp.com*. Information contained on or available through PAA's website is not incorporated into or otherwise a part of this proxy statement/prospectus.

PAA Natural Gas Storage, L.P.

PNG is a Delaware limited partnership that was formed by PAA in 2010. PNG's operations are conducted through its primary operating subsidiaries. PNG GP has ultimate responsibility for conducting PNG's business and managing its operations.

PNG's business consists of the acquisition, development, ownership, operation and commercial management of natural gas storage facilities. As of December 31, 2012, PNG owned and operated three natural gas storage facilities located in Louisiana, Mississippi and Michigan. PNG also leases storage capacity and pipeline transportation capacity from third parties from time to time in order to increase its operational flexibility and enhance the services it offers to its customers.

PNG provides natural gas storage services to a broad mix of customers, including local gas distribution companies, electric utilities, pipelines, direct industrial users, electric power generators, marketers, producers, LNG exporters and affiliates of such entities.

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For the year ended December 31, 2012, PNG had net income of \$73.3 million, or \$0.99 per common unit, and total revenues of \$387.7 million. For the nine months ended September 30, 2013, PNG had net income of \$46.7 million, or \$0.62 per common unit, and total revenues of \$300.0 million.

PNG's executive offices are located at 333 Clay Street, Suite 1500, Houston, Texas 77002. PNG's telephone number is (713) 646-4100, and its internet website address is www.pnglp.com. Information contained on or available through PNG's website is not incorporated into or otherwise a part of this proxy statement/prospectus.

Relationship of PAA and PNG

PAA and PNG are closely related. PAA formed PNG in 2010, and PNG completed its initial public offering later that year. The operations and activities of PNG are managed by its general partner, PNG GP, a wholly-owned subsidiary of PAA. PAA owns approximately 46% of the outstanding PNG common units and 100% of the outstanding PNG subordinated units, and, indirectly through PNG GP, the 2% general partner interest and the PNG IDRs. PNG, its operating subsidiaries and PNG GP have no employees. PNG, PNG GP and PAA have entered into an omnibus agreement pursuant to which PAA provides PNG with certain general and administrative services and employees to operate PNG's business. For more information regarding the omnibus agreement, please see "Certain Relationships; Interests of Certain Persons in the Merger Relationship of PAA and PNG Agreements Between PAA and PNG."

Each of the officers of PNG GP is employed by PAA GP. Certain of PNG's officers devote a substantial portion of their time to managing PNG's business, while other officers have responsibilities for both PNG and PAA. For information about the common executive officers of PAA GP and PNG GP and the resulting interests of PAA GP and PNG GP directors and executive officers in the merger, please read "Certain Relationships; Interests of Certain Persons in the Merger."

In addition, since PNG's initial public offering in 2010, PAA has entered into a number of other transactions with PNG, including the following:

PAA provided \$430 million of capital to support the purchase by PNG of the Southern Pines storage facility in February 2011 through PAA's purchase of 10.2 million PNG common units and the issuance of a \$200 million loan to PNG;

During 2011, PAA began providing guarantees of PNG's trade obligations in exchange for a minimum quarterly fee of \$12,500; and

PAA leased 20 Bcf of storage capacity at PPEC in March 2013 for total minimum payments of \$49 million (10 Bcf for 2 years; 10 Bcf for 3 years).

For more information regarding these and other transactions between PAA and PNG, please see "Certain Relationships; Interests of Certain Persons in the Merger Relationship of PAA and PNG Agreements Between PAA and PNG."

Structure of the Merger

Pursuant to the merger agreement, at the effective time of the merger, MergerCo, a direct wholly-owned subsidiary of PAA, will merge with and into PNG with PNG surviving the merger as a wholly-owned subsidiary of PAA, and each outstanding PNG common unit, other than those PNG common units owned by PAA or any of its subsidiaries, will be converted into the right to receive 0.445 PAA common units. This merger consideration represents an 8.5% premium to the closing price of the PNG common units based on the closing prices of the PNG common units and PAA common units on August 27, 2013, the last trading day before PAA announced its proposal to acquire all of the PNG common units owned by the public.

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If the exchange ratio results in a PNG common unitholder being entitled to receive a fraction of a PAA common unit, that PNG common unitholder will receive cash in lieu of receiving any fractional PAA common unit to which any PNG common unitholder would otherwise have been entitled in an amount equal to such fractional interest multiplied by the average of the closing price of PAA common units for the ten consecutive NYSE full trading days ending at the closing of the last NYSE full trading day immediately preceding the day the merger closes.

Once the merger is completed, former PNG common unitholders who surrender their PNG common units in accordance with the merger agreement will be eligible, in their capacity as PAA unitholders, to receive distributions declared by the PAA GP Board on PAA common units in accordance with PAA's partnership agreement to the extent such unitholders continue to hold such PAA common units as of the applicable record date for such distribution. For a description of the distribution provisions of PAA's partnership agreement, please read "Comparison of the Rights of PAA Unitholders and PNG Unitholders."

Based on the 33,003,173 PNG common units outstanding on October 31, 2013, and eligible to be converted into PAA common units pursuant to the merger agreement (which number does not include the PNG common units owned by PAA or any of its subsidiaries), PAA expects to issue approximately 14.7 million PAA common units in connection with the merger. This number will represent approximately 4.1% of PAA's outstanding common units after the merger, based on the 342,950,166 PAA common units outstanding as of October 31, 2013. In connection with the closing of the merger, the owners of PAA's general partner have agreed to reduce their incentive distribution rights under PAA's partnership agreement by \$12 million in each of 2014 and 2015, \$10 million in 2016 and \$5 million per year thereafter.

PAA's Obligation to Vote Its PNG Common Units and PNG Subordinated Units under the Merger Agreement

Pursuant to the merger agreement, PAA has agreed to vote the PNG common units and PNG subordinated units owned beneficially or of record by it or any of its subsidiaries in favor of the merger agreement and the merger transactions, including the 28,155,526 PNG common units currently held by PAA and the 25,434,351 PNG subordinated units currently held by PAA, which units represent approximately 46% of the outstanding PNG common units and 100% of the outstanding PNG subordinated units, respectively. PAA's obligations will terminate upon the earliest of (i) the effective date of the merger and (ii) the termination of the merger agreement.

Directors and Executive Officers of PAA Following the Merger

The directors and executive officers of each of PAA GP and PNG GP prior to the merger are expected to continue as the directors and executive officers of PAA GP and PNG GP, respectively, following the merger, with the exception of the three independent directors of PNG GP.

Market Prices of PAA Common Units and PNG Common Units Before Announcement of the Proposed Merger

PAA's common units are traded on the NYSE under the ticker symbol "PAA." PNG's common units are traded on the NYSE under the ticker symbol "PNG." The closing price of PAA common units on August 27, 2013 (the last full trading day before PAA announced its proposal to acquire all of the PNG common units owned by the public) was \$51.44, and the closing price of PNG common units on August 27, 2013 was \$21.09.

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PNG Special Meeting

Where and When

The PNG special meeting will take place at , on , 2013, at , local time.

What You Are Being Asked to Vote On

At the PNG special meeting, PNG common unitholders will be asked to consider and vote upon the merger proposal and may be asked to consider and vote upon the adjournment proposal.

Who May Vote

You may vote at the PNG special meeting if you owned PNG common units at the close of business on the record date, 2013. On that date, there were PNG common units outstanding. You may cast one vote for each outstanding PNG common unit that you owned on the record date.

What Vote is Needed

The merger proposal will be approved if the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units vote in favor of the merger proposal at the PNG special meeting and the holders of a majority of the outstanding PNG subordinated units vote in favor of the merger agreement and the merger transactions. Failures to vote and abstentions will have the same effect as a vote against the merger proposal. Pursuant to the merger agreement, PAA has agreed to vote the PNG common units and PNG subordinated units owned beneficially or of record by it or any of its subsidiaries in favor of the merger agreement and the merger agreement and the merger transactions, including the 28,155,526 PNG common units currently held by PAA and the 25,434,351 PNG subordinated units currently held by PAA, which units represent approximately 46% of the outstanding PNG common units and 100% of the outstanding PNG subordinated units, respectively. It is anticipated that PAA, as the holder of all of the PNG subordinated units, will execute a written consent approving the merger agreement and the merger transactions on the date of the special meeting of PNG common unitholders, which consent will satisfy the voting requirement with respect to the holders of the PNG subordinated units.

The adjournment proposal will be approved if the holders, as of the record date of the PNG special meeting, of a majority of the outstanding PNG common units present in person or represented by proxy and entitled to vote at such meeting vote in favor of the adjournment proposal at the PNG special meeting. Abstentions will have the same effect as a vote against this proposal.

Of the PNG common units entitled to vote on the proposals at the PNG special meeting, 2.16% of such PNG common units are held, and eligible to be voted, by certain executive officers and directors, and their affiliates, of PAA or PNG.

Recommendation to PNG Common Unitholders

The members of the PNG Conflicts Committee considered the benefits of the merger agreement and the merger transactions as well as the associated risks and approved and declared the advisability of entering into the merger agreement and the merger transactions and determined that the merger agreement and the merger transactions are fair and reasonable to and in, or not opposed to, the best interest of, PNG and the PNG unaffiliated unitholders. The PNG Conflicts Committee's determination that the merger agreement and the merger transactions are fair and reasonable to PNG constitutes "Special Approval," as such term is defined by the PNG partnership agreement. The PNG Conflicts Committee has caused PNG GP to approve the merger agreement and the merger transactions and directed that the merger agreement and the merger transactions be submitted to the PNG common

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unitholders at the PNG special meeting for approval. The PNG Conflicts Committee recommends that the PNG common unitholders vote in favor of the merger proposal.

PNG common unitholders are urged to review carefully the background and reasons for the merger described under "The Merger" and the risks associated with the merger described under "Risk Factors."

PNG's Reasons for the Merger

The PNG Conflicts Committee considered many factors in determining that the merger agreement and the merger transactions are fair and reasonable to and in, or not opposed to, the best interests of PNG and the PNG unaffiliated unitholders. For a discussion of those factors, please read "The Merger Recommendation of the PNG Conflicts Committee and Reasons for the Merger."

Opinion of the Financial Advisor to the PNG Conflicts Committee

In connection with the transaction, Evercore delivered to the PNG Conflicts Committee its oral opinion, subsequently confirmed by delivery of a written opinion, that, as of October 21, 2013 and based upon and subject to the factors, procedures, assumptions, qualifications and limitations set forth in its opinion, the exchange ratio is fair, from a financial point of view, to the PNG unaffiliated unitholders.

The full text of the written opinion of Evercore, dated as of October 21, 2013, which sets forth, among other things, the procedures followed, assumptions made, matters considered and qualifications and limitations on the scope of review undertaken in rendering its opinion, is attached as Annex B to this proxy statement/prospectus and is incorporated by reference in its entirety into this proxy statement/prospectus.

Evercore's opinion was addressed to, and provided for the information and benefit of, the PNG Conflicts Committee (in its capacity as such) in connection with its evaluation of the fairness of the exchange ratio to be received by the PNG unaffiliated unitholders from a financial point of view, and did not address any other aspects or implications of the merger. Evercore's opinion should not be construed as creating any fiduciary duty on Evercore's part to any party and such opinion is not intended to be, and does not constitute, a recommendation to the PNG Conflicts Committee or to any other persons in respect of the merger, including as to how any PNG common unitholder should act or vote in respect of the merger. Evercore's opinion did not address the relative merits of the merger as compared to other business or financial strategies that might be available to PNG, nor did it address the underlying business decision of PNG to engage in the merger. Evercore expressed no opinion as to the price at which PNG common units or PAA common units will trade at any time.

Certain Relationships; Interests of Certain Persons in the Merger

In considering the recommendations of the PNG Conflicts Committee with respect to the merger, PNG common unitholders should be aware that certain of the directors and executive officers of PAA GP and PNG GP have interests in the transaction that may differ from, or may be in addition to, the interests of PNG common unitholders generally, including:

each of the officers of PAA that are officers of both PAA and PNG GP are expected to continue to serve as officers of PAA following the merger;

each outstanding phantom unit issued pursuant to the PNG LTIP held by officers or directors of PNG GP will be converted in the merger into an equivalent number of PAA phantom units, with adjustments in the number of phantom units to reflect the exchange ratio and the adjustment of performance-based vesting targets to reflect the merger, but otherwise pursuant to the same terms that were in effect prior to the merger. In addition, any such phantom units held by the three independent directors of PNG GP will become non-forfeitable upon the termination of

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such director's service with PNG GP and will fully vest on the next date that would otherwise be a distribution date for PNG;

certain outstanding PAA phantom units held by officers of PNG GP have vesting conditions relating to PNG performance criteria, and such performance criteria may be adjusted to reflect the merger;

the officers of PAA and PNG GP that hold certain phantom subordinated PNG units issued by PAA (and that were not issued pursuant to the PNG LTIP), which had vesting conditions related to PNG and were payable in common or subordinated PNG units held by PAA (the "Transaction Grants"), have agreed to unilaterally surrender such Transaction Grants upon consummation of the merger; and

all of the directors and officers of PNG GP have the right to indemnification under the organizational documents of PNG GP, the PNG partnership agreement and the merger agreement. In addition, all of the directors of PAA and all of the officers of PNG GP have the right to indemnification under the organizational documents of PAA or PNG.

The Merger Agreement

The merger agreement is attached to this proxy statement/prospectus as Annex A and is incorporated by reference into this proxy statement/prospectus. You are encouraged to read the merger agreement in its entirety because it is the legal document that governs the merger.

What Needs to Be Done to Complete the Merger

PAA and PNG will complete the merger only if the conditions set forth in the merger agreement are satisfied or, in some cases, waived. The obligations of PAA and PNG to complete the merger are subject to, among other things, the following conditions:

the merger agreement and the merger transactions will have been approved by the affirmative vote of the PNG unitholders, as of the record date for the PNG special meeting, holding a majority of the outstanding PNG common units, voting as a class, and the holders of a majority of the outstanding PNG subordinated units, voting as a class;

all filings required to be made prior to the effective time with, and all other consents, approvals, permits and authorizations required to be obtained prior to the effective time from, any governmental authority in connection with the execution and delivery of the merger agreement and the consummation of the merger transactions by the parties thereto or their affiliates must have been made or obtained, except where the failure to obtain such consents, approvals, permits and authorizations could not be reasonably likely to result in a material adverse effect with respect to PAA or PNG; provided, however, that, prior to invoking this condition, the invoking party must have used its commercially reasonable efforts to make all required filings and to obtain all required consents, approvals, permits and authorizations as required under the merger agreement;

no order, decree or injunction of any court or agency of competent jurisdiction shall be in effect, and no law shall have been enacted or adopted, that enjoins, prohibits or makes illegal consummation of any of the merger transactions, and no action, proceeding or investigation by any governmental authority with respect to the merger or the other merger transactions may be pending that seeks to restrain, enjoin, prohibit or delay consummation of the merger or such other merger transaction or to impose any material restrictions or requirements thereon or on PAA or PNG with respect thereto; provided, however, that, prior to invoking this condition, the invoking party must have used its reasonable best efforts in good faith to consummate the merger as required under the merger agreement;

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the registration statement of which this proxy statement/prospectus is a part will have become effective under the Securities Act and no stop order suspending the effectiveness of the registration statement may have been issued and no proceedings for that purpose may have been initiated or threatened by the SEC;

the PAA common units to be issued in the merger will have been approved for listing on the NYSE, subject to official notice of issuance; and

PAA must have received an opinion from Vinson & Elkins L.L.P. (and provided a copy of such opinion to the PNG Conflicts Committee) (i) to the effect that (a) no gain or loss should be recognized by the holders of PNG common units as a result of the merger, other than gain resulting from either (1) any decrease in partnership liabilities pursuant to Section 752 of the Internal Revenue Code, or (2) any cash paid in lieu of fractional PAA common units, and (b) no gain or loss should be recognized by the holders of PAA common units as a result of the merger, other than gain resulting from any decrease in partnership liabilities pursuant to Section 752 of the Internal Revenue Code and (ii) that shall provide specifically that the PNG Conflicts Committee may rely on such opinion. Such opinion will be based on customary representations from PAA, PNG and PNG GP regarding certain factual matters.

The obligation of PAA to effect the merger is further subject to the satisfaction by PNG, on or prior to the closing date of the merger, of each of the following conditions, or the waiver thereof by PAA:

each of the representations and warranties of PNG and PNG GP contained in the merger agreement qualified as to materiality or material adverse effect must be true and correct in all respects and those not so qualified must be true and correct in all material respects, in each case, as of the date of the merger agreement and upon the closing date with the same effect as though all such representations and warranties had been made on the closing date (in either case, except for any such representations and warranties made as of a specified date, in which case as of such date); provided, however, that no representations and warranties will be deemed to be untrue or incorrect to the extent that PAA or MergerCo had knowledge of such inaccuracy as of the date of the merger agreement; provided, further, however, that the immediately preceding proviso will not apply if any member of the PNG Conflicts Committee had actual knowledge of any such inaccuracy at the date hereof;

each and all of the agreements and covenants of PNG and PNG GP to be performed and complied with pursuant to the merger agreement on or prior to the effective time must have been duly performed and complied with in all material respects;

PAA will have received a certificate signed by the chief executive officer, president or chief financial officer of PNG GP, dated as of the closing date, to the effect that the conditions described in the first two bullet points immediately above have been satisfied; and

there must not have occurred a material adverse effect (as defined in the merger agreement) with respect to PNG between the signing of the merger agreement and the closing date.

The obligation of PNG to effect the merger is further subject to the satisfaction by PAA, on or prior to the closing date of the merger, of each of the following conditions, or the waiver thereof by PNG:

each of the representations and warranties of PAA and MergerCo contained in the merger agreement qualified as to materiality or material adverse effect must be true and correct in all respects and those not so qualified must be true and correct in all material respects, in each case, as of the date of the merger agreement and upon the closing date with the same effect as though all such representations and warranties had been made on the closing date (in either case, except for any such representations and warranties made as of a specified date, in which

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case as of such date); provided, however, that no representations and warranties will be deemed to be untrue or incorrect to the extent that any member of the PNG Conflicts Committee or its representatives had actual knowledge of such inaccuracy at the date hereof; provided, further, however, that the immediately preceding proviso will not apply if any executive officer or director of PAA or MergerCo had knowledge of any such inaccuracy at the date of the merger agreement;

each and all of the agreements and covenants of PAA and MergerCo to be performed and complied with pursuant to the merger agreement on or prior to the closing date must have been duly performed and complied with in all material respects;

PNG must have received a certificate signed by the chief executive officer, president or chief financial officer of PAA, dated as of the closing date, to the effect that the conditions described in the first two bullet points immediately above have been satisfied; and

there must not have occurred a material adverse effect (as defined in the merger agreement) with respect to PAA between the date of the merger agreement and the closing date.

The merger agreement provides that the PNG common unitholder voting condition may not be waived. Each of PAA and PNG (with the consent of the PNG Conflicts Committee, in the case of PNG) may choose to complete the merger even though any other condition to its obligation has not been satisfied if the necessary PNG common unitholder approval has been obtained and the law allows it to do so.

Unitholder Approval; Acquisition Proposal; Change in Recommendation

Subject to the terms and conditions of the merger agreement, and except as described further in "The Merger Agreement Covenants Unitholder Approval," PNG will take, in accordance with applicable law, applicable stock exchange rules and PNG's partnership agreement, all action necessary to call, hold and convene the PNG special meeting to consider and vote upon the approval of the merger proposal, as promptly as practicable after the registration statement of which this proxy statement/prospectus is a part is declared effective. Subject to the terms and conditions of the merger agreement, the PNG Conflicts Committee will recommend approval of the merger proposal to the PNG common unitholders, and PNG will take all reasonable lawful action to solicit such approval by the PNG common unitholders. Except under certain conditions described in the following paragraph and in "The Merger Agreement Covenants Unitholder Approval," neither the PNG Conflicts Committee nor the PNG GP Board will (i) withdraw, modify or qualify in any manner adverse to PAA the recommendation of the PNG Conflicts Committee and the PNG GP Board or (ii) publicly approve, adopt or recommend, or publicly propose to approve, adopt or recommend, any "acquisition proposal" (defined and described more fully under "The Merger Agreement Covenants Acquisition Proposals"). The actions described in the preceding sentence are referred to in this proxy statement/prospectus as a "PNG Change in Recommendation." None of PNG GP, PNG or any of their subsidiaries will execute or enter into any letter of intent, memorandum or understanding, agreement in principle, merger agreement, acquisition agreement, option agreement, joint venture agreement, partnership agreement or other similar contract providing for any acquisition proposal.

Notwithstanding the above paragraph, at any time prior to obtaining the PNG unitholder approval, the PNG Conflicts Committee or the PNG GP Board may make a PNG Change in Recommendation if it has determined in good faith, after consultation with its outside legal counsel and financial advisors, that failure to make a PNG Change in Recommendation would be inconsistent with its duties under PNG's partnership agreement or applicable law; provided, however, that neither the PNG Conflicts Committee nor the PNG GP Board will be entitled to exercise its right to make a PNG Change in Recommendation unless (i) PNG has provided to PAA three business days prior written notice, advising PAA that the PNG Conflicts Committee or the PNG GP Board intends to take such action, specifying the reasons for taking such action in reasonable detail and if such action is in response to an

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acquisition proposal (defined and described more fully under "The Merger Agreement Covenants Acquisition Proposals"), such acquisition proposal is not the result of a material breach of the merger agreement and the written notice specifies the material terms and conditions of such acquisition proposal, the identity of the person making such acquisition proposal and affirmatively states that the PNG Conflicts Committee has determined that such proposal constitutes a superior proposal (defined and described more fully under "The Merger Agreement Covenants Superior Proposals"), (ii) each of PNG and the PNG Conflicts Committee has negotiated, and has used its commercially reasonable efforts to cause its representatives to negotiate, in good faith with PAA during such notice period to enable PAA to revise the terms of the merger agreement such that it would obviate the need for making the PNG Change in Recommendation, and (iii) following the end of such notice period, the PNG Conflicts Committee will have considered in good faith any changes to the merger agreement proposed by PAA and will have determined that the failure to make a PNG Change in Recommendation would continue to be inconsistent with its duties under PNG's partnership agreement or applicable law even if such revisions proposed by PAA were to be given effect. Any such PNG Change in Recommendation will not invalidate the approval of the merger agreement or any other approval of the PNG Conflicts Committee, including in any respect that would have the effect of causing any state (including Delaware) takeover statute or other similar statute to be applicable to the merger transactions.

PNG GP and PNG will, and they will cause the subsidiaries and representatives of PNG GP and PNG to, immediately cease and terminate any solicitation, encouragement, discussions or negotiations with any person that may be ongoing with respect to or that may reasonably be expected to lead to an acquisition proposal.

Neither the PNG GP nor PNG will, and they use their commercially reasonable efforts to cause the subsidiaries and the representatives of PNG GP and PNG not to, directly or indirectly, (i) initiate, solicit, knowingly encourage or knowingly facilitate (including by way of furnishing information) any inquiries regarding, or the making or submission of any proposal or offer that constitutes, or may reasonably be expected to lead to, an acquisition proposal, (ii) conduct or participate in any discussions or negotiations regarding any acquisition proposal, or (iii) furnish to any person any non-public information or data relating to PNG or any of its subsidiaries. Notwithstanding the foregoing, at any time prior to obtaining the PNG unitholder approval, the PNG Conflicts Committee may take the actions described in clauses (ii) and (iii) above with respect to any person that makes a bona fide written acquisition proposal that did not result from a material breach of the provisions of the merger agreement described in this paragraph, if (a) the PNG Conflicts Committee, after consultation with its outside legal counsel and financial advisors, determines in good faith that such acquisition proposal constitutes or is could reasonably be expected to result in a superior proposal and that the failure to take such action would be inconsistent with duties under PNG's partnership agreement or applicable law, and (b) prior to furnishing any such non-public information to such person, PNG receives from such person an executed confidentiality agreement with reasonable and customary terms as to the treatment of confidential information.

Termination of the Merger Agreement

PAA and PNG can agree to terminate the merger agreement by mutual written consent at any time without completing the merger, even after the PNG common unitholders have approved the merger proposal. In addition, either party may terminate the merger agreement on its own upon written notice to the other without completing the merger if:

the merger is not completed on or before April 30, 2014; provided, however, that the right to terminate the merger agreement due to the failure to complete the merger on or before April 30, 2014 will not be available to a party whose failure to fulfill any material obligation under the merger agreement or other material breach of the merger agreement has been the

primary cause of, or resulted in, the failure of the merger to have been consummated on or before April 30, 2014;

any governmental authority has issued a final and non-appealable statute, rule, order, decree or regulation or taken any other action that permanently restrains, enjoins or prohibits the consummation of the merger, or makes the merger illegal, so long as the terminating party is not then in material breach of the merger agreement;

there has been a material breach of or any material inaccuracy in any of the representations or warranties set forth in the merger agreement on the part of any of the other parties, which breach is not cured within 30 days following receipt by the breaching party of written notice of its breach from the terminating party, or which breach, by its nature, cannot be cured prior to April 30, 2014, provided in any such case that the terminating party is not then in material breach of any representation, warranty, covenant or other agreement contained in the merger agreement. No party will have the right, however, to terminate the merger agreement pursuant to the provision summarized in this bullet point unless the breach of a representation or warranty, together with all other such breaches, would entitle the party receiving such representation not to consummate the transactions contemplated by the merger agreement because the closing conditions described in the first bullet point under "The Merger Agreement Conditions to the Merger Additional Conditions to the Obligations of PAA" or "The Merger Agreement Conditions to the Merger Additional Conditions of PNG," as applicable, have not been met:

there has been a material breach of any of the covenants or agreements set forth in the merger agreement on the part of any of the other parties to the merger agreement, and the breach has not been cured within 30 days following receipt by the breaching party of written notice of such breach from the terminating party, or which breach, by its nature, cannot be cured prior to April 30, 2014, so long as the terminating party itself is not then in material breach of any representation, warranty, covenant or other agreement contained in the merger agreement. In no event, however, will any party have the right to terminate the merger agreement pursuant to the provision summarized in this bullet point unless the breach of covenants or agreements, together with all other such breaches, would entitle the party receiving the benefit of such covenants or agreements not to consummate the transactions contemplated by the merger agreement because the closing conditions described in the first bullet point under "The Merger Agreement Conditions to the Merger Additional Conditions to the Obligations of PNG," as applicable, have not been met;

PNG does not obtain the PNG unitholder approval at the PNG special meeting; provided, however, that the right to terminate the merger agreement under the provision described in this bullet point will not be available to the terminating party where the failure to obtain the PNG unitholder approval has been caused by the action or failure to act of the terminating party and such action or failure to act constitutes a material breach by the terminating party of the merger agreement; or

a PNG Change in Recommendation has occurred.

Federal Income Tax Consequences of the Merger

Tax matters associated with the merger are complicated. The U.S. federal income tax consequences of the merger to a PNG common unitholder will depend on such common unitholder's own personal tax situation. The tax discussions contained herein focus on the U.S. federal income tax consequences generally applicable to individuals who are residents or citizens of the United States that hold their PNG common units as capital assets, and these discussions have only limited application to other unitholders, including those subject to special tax treatment. PNG common unitholders are urged to

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consult their tax advisors for a full understanding of the U.S. federal, state, local and foreign tax consequences of the merger that will be applicable to them.

In connection with the merger, PAA will receive an opinion from Vinson & Elkins L.L.P. to the effect that no gain or loss should be recognized by the holders of PNG common units as a result of the merger, other than gain resulting from either (i) any decrease in partnership liabilities pursuant to Section 752 of the Internal Revenue Code, or (ii) any cash paid in lieu of fractional PAA common units.

Please read "Material U.S. Federal Income Tax Consequences of the Merger" beginning on page 120 for a more complete discussion of the U.S. federal income tax consequences of the merger.

Other Information Related to the Merger

No Appraisal Rights

PNG common unitholders do not have appraisal rights under PNG's partnership agreement, the merger agreement or Delaware or other applicable law.

Antitrust and Regulatory Matters

No antitrust or other regulatory clearances are required as a condition to the consummation of the merger.

Listing of PAA Common Units to be Issued in the Merger; Delisting and Deregistration of PNG Common Units

PAA expects to obtain approval to list on the NYSE the PAA common units to be issued pursuant to the merger agreement, which approval (subject to official notice of issuance) is a condition to the merger. Upon completion of the merger, PNG common units currently listed on the NYSE will cease to be listed on the NYSE and will be subsequently deregistered under the Exchange Act.

Accounting Treatment

The merger will be accounted for in accordance with Financial Accounting Standards Board Accounting Standards Codification 810, *Consolidations Overall Changes in Parent's Ownership Interest in a Subsidiary*, which is referred to as ASC 810. As PAA will control PNG before and after the merger, the changes in PAA's ownership interest in PNG will be accounted for as an equity transaction and no gain or loss on the merger will be recognized in PAA's consolidated statements of operations.

Comparison of the Rights of PAA Unitholders and PNG Unitholders

PNG common unitholders will own PAA common units following the completion of the merger, and their rights associated with PAA common units will be different from their rights as PNG common unitholders due to the differences between the governing documents of PAA and PNG. See "Comparison of the Rights of PAA Unitholders and PNG Unitholders" beginning on page 100 of this proxy statement/prospectus.

Pending Litigation

Following the announcement of PAA's August 27, 2013 transaction proposal, purported PNG common unitholders filed lawsuits in Delaware and Texas asserting claims relating to that proposal.

Stephen Ellman, a purported unitholder of PNG, filed a class action complaint on behalf of the PNG common unitholders in the Delaware Court of Chancery (the "Ellman Lawsuit") on September 17, 2013. The lawsuit names as defendants PAA, PNG, PNG GP, PAA GP LLC, Plains AAP, L.P., Plains All American GP LLC and the PNG GP Board. The Ellman Lawsuit alleges that

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(i) PNG's partnership agreement fails to alter or eliminate defendants' common law fiduciary duties owed to PNG common unitholders in the context of the proposed merger; (ii) PAA, as a controlling unitholder, failed to fulfill its fiduciary duties in connection with the proposed merger because it purportedly cannot establish that the proposed merger is the result of a fair process that will return a fair price to PNG common unitholders; (iii) the director defendants breached their fiduciary duties of loyalty, good faith, fair dealing, due care, and full and fair disclosure by failing to maximize the value of PNG; and (iv) the non-director defendants aided and abetted the director defendants in their purported breach of fiduciary duties.

Robert and Teresa Vicars, purported unitholders of PNG, filed a class action petition on behalf of the PNG common unitholders and a derivative suit on behalf of PNG against PAA, PNG, PNG GP and the PNG GP Board, in the 152nd Judicial District Court of Harris County, Texas (the "Vicars Lawsuit") on September 9, 2013, and on October 31, 2013, plaintiffs filed an amended petition. The allegations and claims in the Vicars Lawsuit are similar to those in the Ellman Lawsuit. The Vicars Lawsuit specifically alleges that the director defendants: (i) engaged in self-dealing, failed to act in good faith toward PNG and breached their duties owed to PNG; (ii) failed to properly value PNG and its various assets and operations and ignored or failed to protect against numerous conflicts of interest arising out of the proposed transaction; and (iii) breached the implied covenant of good faith and fair dealing by engaging in a flawed merger process. The Vicars Lawsuit also alleges that PAA and PNG GP aided and abetted the director defendants in their purported breach of duties.

Plaintiffs in the Ellman and Vicars Lawsuits seek to enjoin defendants from proceeding with or consummating the proposed merger. To the extent that the merger is implemented before relief is granted, the plaintiffs seek to have the merger rescinded. The plaintiffs also seek money damages and attorneys' fees.

On October 29, 2013, the DuckPond CRT UTD 2/14/2003, another purported unitholder of PNG, filed a class action complaint in the United States District Court for the Southern District of Texas Houston Division (the "DuckPond Lawsuit") against the same defendants as in the Ellman Lawsuit. The DuckPond Lawsuit also names MergerCo as a defendant. In DuckPond, the complaint alleges, among other things, that the implied price per unit materially undervalues PNG and is unfair to its unitholders. The DuckPond plaintiff further alleges that the defendants who are directors and officers of PNG GP have breached their fiduciary duties of loyalty and care and the other defendants have aided and abetted in these alleged breaches.

The Plaintiff in the DuckPond Lawsuit seeks a declaration that the merger agreement was entered into in breach of the defendants' alleged fiduciary duties, a rescission of the merger agreement to the extent it has been implemented, an imposition of the constructive trust in favor of the purported class of PNG common unitholders, as well as an award of costs and attorneys' fees.

Each of these lawsuits is at a preliminary stage. PAA and PNG cannot predict the outcome of these or any other lawsuits that might be filed subsequent to the date of the filing of this proxy statement/prospectus, nor can PAA and PNG predict the amount of time and expense that will be required to resolve these lawsuits. PAA, PNG and the other defendants named in the lawsuits intend to defend vigorously against these and any other actions.

Summary of Risk Factors

You should consider carefully all of the risk factors together with all of the other information included in this proxy statement/prospectus before deciding how to vote. The risks related to the merger transactions, PAA's business following the merger, PAA's common units and PNG's business and common units if the merger does not occur, and tax related risks are described under the caption "Risk Factors" beginning on page 22 of this proxy statement/prospectus.

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Organizational Chart

Before the Merger

(1)

Represents direct ownership of approximately 10.7 million PAA common units by certain investors and management as of September 30, 2013, based on information provided by such investors and management.

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After the Merger

The following diagram depicts the organizational structure of PAA and PNG immediately after giving effect to the merger and the other merger transactions.

(1)

Represents direct ownership of approximately 10.7 million PAA common units by certain investors and management as of September 30, 2013, based on information provided by such investors and management.

Selected Historical Financial and Operating Information of PAA and PNG

The following tables set forth, for the periods and at the dates indicated, summary historical financial and operating information for PAA and PNG. The summary historical financial data as of and for each of the years ended December 31, 2008, 2009, 2010, 2011 and 2012, are derived from and should be read in conjunction with the audited financial statements and accompanying footnotes of PAA and PNG, respectively. The summary historical financial data as of and for the nine-month periods ended September 30, 2012 and 2013, are derived from and should be read in conjunction with the unaudited financial statements and accompanying footnotes of PAA and PNG, respectively. The summary historical financial data as of and for the nine-month periods ended September 30, 2012 and 2013, are derived from and should be read in conjunction with the unaudited financial statements and accompanying footnotes of PAA and PNG, respectively. PAA's and PNG's consolidated balance sheets as of December 31, 2011 and 2012, and as of September 30, 2013, and the related consolidated statements of operations, comprehensive income, cash flows and partners' capital for each of the three years in the period ended December 31, 2012, and the nine months ended September 30, 2013, are incorporated by reference into this proxy statement/prospectus from PAA's and PNG's respective Annual Reports on Form 10-K for the year ended December 31, 2012, and their respective Quarterly Reports on Form 10-Q for the nine months ended September 30, 2013.

	Consolidated Historical for Plains All American Pipeline, L.P. Nine Months Ended													Ended
			Year E		30,									
		2008		2009		2010 2011			2012			2012		2013
					(in	millions,	exc	ept per u	nit	amounts)				
Statement of operations data:														
Total revenues	\$	30,061	\$	18,520	\$	25,893	\$	34,275	\$	37,797	\$	28,358	\$	31,617
Net income	\$	437	\$	580	\$	514	\$	994	\$	1,127	\$	797	\$	1,074
Net income attributable to PAA	\$	437	\$	579	\$	505	\$	966	\$	1,094	\$	774	\$	1,052
Per unit data:														
Basic net income per limited														
partner unit	\$	1.33	\$	1.67	\$	1.21	\$	2.46	\$	2.41	\$	1.71	\$	2.23
Diluted net income per limited	Diluted net income per limited													
partner unit	\$	1.32	\$	1.66	\$	1.20	\$	2.44	\$	2.40	\$	1.70	\$	2.22
Declared distributions per limited														
partner unit(1)	\$	1.75	\$	1.81	\$	1.88	\$	1.95	\$	2.11	\$	1.57	\$	1.73
Balance sheet data (at end of														
period):														
Total assets	\$	10,032	\$	12,358	\$	13,703	\$	15,381	\$	19,235	\$	18,187	\$	20,267
Long-term debt	\$	3,259	\$	4,142	\$	4,631	\$	4,520	\$	6,320	\$	5,811	\$	7,018
Total debt	\$	4,286	\$	5,216	\$	5,957	\$	5,199	\$	7,406	\$	6,645	\$	7,637
Partners' capital	\$	3,552	\$	4,159	\$	4,573	\$	5,974	\$	7,146	\$	6,925	\$	7,684
Other financial data:														
Net cash provided by operating														
activities	\$	857	\$	365	\$	259	\$	2,365	\$	1,240	\$	880	\$	1,594
Net cash used in investing														
activities	\$	(1,339)	\$	(686)	\$	(851)	\$	(2,020)	\$	(3,392)	\$	(2,376)	\$	(1,340)
Net cash provided by/(used in)														
financing activities	\$	464	\$	338	\$	604	\$	(345)	\$	2,151	\$	1,501	\$	(242)

(1)

Represents cash distributions declared and paid during the year presented. PAA's general partner is entitled, directly or indirectly, to receive 2% proportional distributions, as well as incentive distributions of the amount PAA distributes with respect to any quarter that exceed levels specified in PAA's partnership agreement.

	Consolidated Historical for PAA Natural Gas Storage, L.P.
Predecessor	Successor

	Year 2009 Ended through December Se ptember 2		, , ,			l Year l, Ended December 3			/		/		Nine M End Septem 1, 2012		ded	
	2	008	2009	4		(Unaudited)		2010		2011		2012	2	012	2	015
					(in	millions, excep	t p	er unit a	mo	unts)						
Statement of operations data:																
Total revenues	\$		\$ 47	\$	25	\$72		100		343	\$	388	\$	275	\$	300
Net income	\$	20	\$ 16	\$	2	\$14	\$	30	\$	60	\$	73	\$	51	\$	47
Per unit data:																
Basic net income per limited																
partner unit(2)		n/a	n/a		n/a	n/a	\$	0.54	\$	0.85	\$	0.99	\$	0.69	\$	0.62
Diluted net income per limited																
partner unit(2)		n/a	n/a		n/a	n/a	\$	0.54	\$	0.85	\$	0.99	\$	0.69	\$	0.62
Declared distribution per limited																
partner unit(3)		n/a	n/a		n/a	n/a	\$	0.89	\$	1.41	\$	1.43	\$	1.07	\$	1.07
Balance sheet data (at end of																
period):																
Total assets	\$	811		\$	900		\$	999	\$	1,850	\$	1,869	\$	1,846	\$ 1	1,864
Long-term debt(4)	\$	415		\$	451		\$	260		454	-	505	\$	495	\$	503
Total debt	\$	418		\$	451		\$	260	\$	522	\$	582	\$	575	\$	550
Members'/partners' capital	\$	363		\$	433		\$	723	\$	1,286	\$	1,251	\$	1,242	\$ 1	1,273
Other financial data:																
Net cash provided by/(used in)																
operating activities	\$	22	\$ 23	\$	15		\$	44	\$	44	\$	104	\$	69	\$	109
Net cash provided by/(used in)																
investing activities	\$	(119)	\$ (59)	\$	(10)		\$	(104)	\$	(810)	\$	(60)	\$	(44)	\$	(36)
Net cash provided by/(used in) financing activities	\$	122	\$ 24	\$	(23)		\$	56	\$	767	\$	(45)	\$	(25)	\$	(72)

(1)

In September 2009, Plains All American Pipeline, L.P. became the sole owner of a predecessor of PNG by acquiring an additional 50% interest in that predecessor. Application of push-down accounting in conjunction with this transaction resulted in financial information for periods prior to and subsequent to this transaction being prepared under a different basis of accounting. For comparison purposes, the pro forma presentation places the 2009 period on the same basis of accounting as the most recent period. The following items were impacted by the adjustment: General and administrative expenses, Depreciation, depletion, and amortization, and Interest expense. The net impact of the pro forma adjustments was a \$4.0 million decrease to Net income and Adjusted Net Income and a \$1.2 million decrease in EBITDA and Adjusted EBITDA for the year ended December 31, 2009.

(2)

Reflective of general and limited partner interest in net income since closing of PNG's initial public offering.

(3)

Amount represents distributions per limited partner unit attributable to the fiscal period. Cash distributions for a fiscal quarter are declared and paid in the following calendar quarter. No distributions were declared for any periods prior to May 5, 2010, the closing of PNG's initial public offering. The PNG Series B Subordinated Units were not entitled to receive distributions for any of the periods presented.

(4)

Excludes approximately \$76.7 million and \$68.0 million of borrowings under PNG's senior unsecured credit agreement as of December 31, 2012 and 2011, respectively. Such borrowings, which are related to a portion of PNG's funded hedged natural gas inventory, have been designated as working capital borrowings and must be repaid within one year.

Comparative Per Unit Information

The following table sets forth (i) historical per share information for PAA, (ii) the unaudited pro forma per share information of PAA after giving effect to the proposed merger and other merger transactions, including PAA's issuance of 0.445 PAA common units for each outstanding PNG common unit (other than the PNG common units owned by PAA), and (iii) the historical and equivalent pro forma per unit information for PNG.

You should read this information in conjunction with (i) the summary historical financial information included elsewhere in this proxy statement/prospectus and the (ii) the historical consolidated financial statements of PAA and PNG and related notes that are incorporated by reference into this proxy statement/prospectus. The unaudited pro forma per unit information does not purport to represent what the actual results of operations of PAA and PNG would have been had the

proposed merger been completed in another period or to project PAA's and PNG's results of operations that may be achieved if the proposed merger is completed.

	Year Ended December 31, 2012										
		P	AA		PNG						
	His	Historical Pro Forma				storical		quivalent) Forma(1)			
Net income per unit:											
Basic net income per limited partner unit	\$	2.41	\$	2.40	\$	0.99	\$	1.07			
Diluted net income per limited partner unit	\$	2.40	\$	2.38	\$	0.99	\$	1.06			
Declared distributions per limited partner unit	\$	2.11(2	2)\$	2.11	\$	1.43(2)\$	0.94			
Book value per unit	\$	19.05(3	5)	N/A	\$	14.44(4)	N/A			

	Nine Months Ended September 30, 2013										
		P	AA		PNG						
	His	Historical Pro Forma				storical		uivalent Forma(1)			
Net income per unit:											
Basic net income per limited partner unit	\$	2.23	\$	2.20	\$	0.62	\$	0.98			
Diluted net income per limited partner unit	\$	2.22	\$	2.19	\$	0.62	\$	0.97			
Declared distributions per limited partner unit	\$	1.73(2	2)\$	1.73	\$	1.07(2	2)\$	0.77			
Book value per unit	\$	20.04(3	3)\$	20.55	\$	14.36(4	I) \$	9.15			

(1)

PNG's equivalent pro forma earnings, book value, and cash distribution amounts have been calculated by multiplying PAA's pro forma per share amounts by the exchange ratio noted above.

(2)

Represents cash distributions declared and paid during the year presented.

(3)

PAA's book value per unit for each respective period has been calculated by dividing the portion of equity attributable to the limited partnership interest by the common units outstanding at each respective balance sheet date.

(4)

PNG's book value per unit for each respective period has been calculated by dividing the portion of equity attributable to the common and subordinated unitholders by the outstanding common and subordinated units at each respective balance sheet date.

Market Prices and Distribution Information

Common units of Plains All American Pipeline, L.P. trade on the NYSE under the ticker symbol "PAA," and common units of PAA Natural Gas Storage, L.P. trade on the NYSE under the ticker symbol "PNG." The following table sets forth, for the periods indicated, the range of high and low sales prices per unit for PAA common units and PNG common units, on the NYSE composite tape, as well as information concerning quarterly cash distributions declared and paid on these units.

			Р	PAA	comm	ion u	inits		PNG common units							
		Hi	igh(2)	L	ow(2)	Dist	ributions(1)(2)]	High Low			Distrik	outions(1)			
2010			-						-							
First Quarter		\$	28.56	\$	24.91	\$	0.4675									
Second Quarter(3)		\$	30.03	\$	22.06	\$	0.4713	\$	26.00	\$	22.25	\$	0.2114			
Third Quarter		\$	32.11	\$	28.67	\$	0.4750	\$	26.65	\$	22.61	\$	0.3375			
Fourth Quarter		\$	32.60	\$	30.46	\$	0.4788	\$	25.75	\$	22.61	\$	0.3450			
2011																
First Quarter		\$	32.98	\$	30.11	\$	0.4850	\$	25.50	\$	22.73	\$	0.3450			
Second Quarter		\$	32.85	\$	28.90	\$	0.4913	\$	24.92	\$	20.75	\$	0.3450			
Third Quarter		\$	32.49	\$	28.21	\$	0.4975	\$	23.72	\$	15.91	\$	0.3575			
Fourth Quarter		\$	36.78	\$	27.45	\$	0.5125	\$	18.99	\$	15.51	\$	0.3575			
2012																
First Quarter		\$	42.24	\$	34.74	\$	0.5225	\$	19.48	\$	17.64	\$	0.3575			
Second Quarter		\$	41.23	\$	37.59	\$	0.5325	\$	19.48	\$	16.51	\$	0.3575			
Third Quarter		\$	45.57	\$	40.18	\$	0.5425	\$	20.32	\$	17.70	\$	0.3575			
Fourth Quarter		\$	47.14	\$	42.60	\$	0.5625	\$	20.79	\$	17.95	\$	0.3575			
2013																
First Quarter		\$	57.17	\$	45.95	\$	0.5750	\$	21.82	\$	19.05	\$	0.3575			
Second Quarter		\$	59.52	\$	50.15	\$	0.5875	\$	23.10	\$	18.65	\$	0.3575			
Third Quarter		\$	57.72	\$	48.86	\$	0.6000	\$	23.59	\$	20.21	\$	0.3575			
Fourth Quarter																
(through	, 2013)	\$		\$			(4)	\$		\$			(4)			

(1)

Represents cash distributions per common unit declared with respect to the quarter presented and paid in the following quarter.

(2)

On October 1, 2012, PAA completed a two-for-one split of PAA common units, which has been retroactively applied to all unit and per-unit amounts presented for periods prior to October 1, 2012 to reflect the two-for-one unit split.

(3)

PNG's distribution paid for the second quarter of 2010 represents PNG's minimum quarterly distribution prorated for the period from May 5, 2010 (the date of closing of PNG's initial public offering) through June 30, 2010

(4)

PAA cash distributions with respect to the fourth quarter of 2013 are expected to be declared in January 2014 and paid in February 2014. PNG cash distributions with respect to the fourth quarter of 2013 are expected to be declared in January 2014 and would be paid in February 2014 if the merger is not consummated prior to the record date for such distribution.

The last reported sale price of PNG common units on the NYSE on August 27, 2013, the last trading day before PAA announced its proposal to acquire all of the PNG common units owned by the public, was \$21.09. The last reported sale price of PAA common units on the NYSE on August 27, 2013, was \$51.44. The last reported sale price of PNG common units on the NYSE on , 2013, the latest practicable date prior to the printing of this proxy statement/prospectus, was \$. The last reported sale price of PAA common units on the NYSE on , 2013, was \$.

As of , 2013, PAA had common units outstanding held by approximately holders of record. PAA's partnership agreement requires it to distribute all of its "available cash," as determined by PAA GP in accordance with PAA's partnership agreement, within 45 days after the end of each quarter. The payment of quarterly cash distributions of PAA in the future, therefore, will depend on the amount of its "available cash" at the end of the quarter. For additional information with respect to the calculation of "available cash" under PAA's partnership

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agreement, see "Comparison of the Rights of PAA Unitholders and PNG Unitholders Distribution of Available Cash."

As of approximately approximately approximately agreement date for the PNG special meeting, PNG had bolders of record. PNG's partnership agreement requires it to distribute all of its "available cash," as determined by PNG GP in accordance with PNG's partnership agreement, within 45 days after the end of each quarter. Prior to the termination of the merger agreement or the effective time of the merger, it is expected that PNG common unitholders will continue to receive quarterly distributions on their PNG common units consistent with past practice, provided that the record date for such quarterly distribution occurs prior to the effective time of the merger. If the merger agreement terminates and current market conditions persist as it is assumed through 2016, PNG would experience meaningful degradation of its earnings and distributable cash flow through 2018 relative to forecasted levels for 2013. This may, in turn, force PNG to issue additional equity, borrow additional money or reduce its distribution levels.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This proxy statement/prospectus and the documents PAA and PNG have incorporated herein by reference contain various forward-looking statements and information that reflects PAA's and/or PNG's current beliefs, expectations or intentions regarding future events. These forward-looking statements may be identified by the use of words such as "may," "will," "could," "should," "would," "expect," "plan," "project," "intend," "anticipate," "believe," "estimate," "forecast," "predict," "potential," "pursue," "target," "continue," "contemplate" and similar expressions that contemplate future events. These statements appear in a number of places in this proxy statement/prospectus and in the documents incorporated by reference.

All statements other than statements of historical fact included or incorporated by reference in this proxy statement/prospectus, including statements regarding PAA's and/or PNG's financial position, business strategy and other plans and objectives for future operations or transactions, and including statements regarding the approval of the merger agreement and the merger transactions, the satisfaction of the closing conditions to the merger, the timing of the completion of the merger, expected U.S. federal income tax consequences, expectations and intentions regarding outstanding litigation, expectations with respect to the synergies, costs and other anticipated effects of the merger and expectations regarding PNG's business and common units if the merger does not occur, are forward-looking statements.

Although PAA and PNG believe that such forward-looking statements are based on reasonable assumptions, neither PAA nor PNG gives any assurance that such expectations will in fact occur. Certain factors could cause actual results to differ materially from those in the forward-looking statements. Such factors include, but are not limited to:

the possibility that the merger transactions are not consummated in a timely manner or at all;

the diversion of management in connection with the merger and PAA's ability to realize fully or at all the anticipated benefits of the merger;

failure to implement or capitalize, or delays in implementing or capitalizing, on planned internal growth projects;

unanticipated changes in crude oil market structure, grade differentials and volatility (or lack thereof);

the availability of, and PAA's ability to consummate, acquisition or combination opportunities;

the successful integration and future performance of acquired assets or businesses and the risks associated with operating in lines of business that are distinct and separate from PAA's historical operations;

the occurrence of a natural disaster, catastrophe, terrorist attack or other event, including attacks on PAA's electronic and computer systems;

tightened capital markets or other factors that increase PAA's cost of capital or limit PAA's access to capital;

maintenance of PAA's credit rating and ability to receive open credit from PAA's suppliers and trade counterparties;

continued creditworthiness of, and performance by, PAA's counterparties, including financial institutions and trading companies with which PAA does business;

the effectiveness of PAA's risk management activities;

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environmental liabilities or events that are not covered by an indemnity, insurance or existing reserves;

declines in the volume of crude oil, refined product and NGL shipped, processed, purchased, stored, fractionated and/or gathered at or through the use of PAA's facilities, whether due to declines in production from existing oil and gas reserves, failure to develop or slowdown in the development of additional oil and gas reserves or other factors;

shortages or cost increases of supplies, materials or labor;

fluctuations in refinery capacity in areas supplied by PAA's mainlines and other factors affecting demand for various grades of crude oil, refined products and natural gas and resulting changes in pricing conditions or transportation throughput requirements;

PAA's ability to obtain debt or equity financing on satisfactory terms to fund additional acquisitions, expansion projects, working capital requirements and the repayment or refinancing of indebtedness;

the impact of current and future laws, rulings, governmental regulations, accounting standards and statements, and related interpretations;

non-utilization of PAA's assets and facilities;

the effects of competition;

interruptions in service on third-party pipelines;

increased costs or lack of availability of insurance;

fluctuations in the debt and equity markets, including the price of PAA's units at the time of vesting under PAA's long-term incentive plans;

the currency exchange rate of the Canadian dollar;

weather interference with business operations or project construction;

risks related to the development and operation of PAA's facilities;

factors affecting demand for natural gas and natural gas storage services and rates;

general economic, market or business conditions and the amplification of other risks caused by volatile financial markets, capital constraints and pervasive liquidity concerns;

other factors and uncertainties inherent in the transportation, storage, terminalling and marketing of crude oil and refined products, as well as in the storage of natural gas and the processing, transportation, fractionation, storage and marketing of natural gas liquids; and

other factors and uncertainties inherent in the ownership, development and operation of natural gas storage facilities.

PAA and PNG caution that the foregoing list of factors is not exclusive. Additional information concerning these and other risk factors is contained in PAA's and PNG's most recently filed Annual Reports on Form 10-K, subsequent Quarterly Reports on Form 10-Q, recent Current Reports on Form 8-K, and other SEC filings. In addition, PAA and PNG may be subject to currently unforeseen risks that may have a materially adverse effect on them. All subsequent written and oral forward-looking statements concerning PAA, PNG, the proposed merger or other matters and attributable to PAA or PNG or any person acting on their behalf are expressly qualified in their entirety by the cautionary statements above. The forward-looking statements speak only as of the date made and, other than as required by law, neither PAA nor PNG undertakes any obligation to update publicly or revise any of these forward-looking statements, whether as a result of new information, future events or otherwise.

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RISK FACTORS

An investment in PAA common units involves risks. You should consider carefully the following risk factors, together with all of the other information included in, or incorporated by reference into, this proxy statement/prospectus before deciding how to vote. In addition, you should read and consider the risks associated with the businesses of PAA and PNG. In particular, please read Part I, Item 1A. "Risk Factors," in the Annual Reports on Form 10-K for the year ended December 31, 2012, for each of PAA and PNG, and Part II, Item 1A. "Risk Factors," in the Quarterly Reports on Form 10-Q for the quarter ended September 30, 2013, for each of PAA and PNG, incorporated by reference herein. This proxy statement/prospectus also contains forward-looking statements that involve risks and uncertainties. Please read "Special Note Regarding Forward-Looking Statements."

Risks Related to the Merger

The exchange ratio is fixed and will not be adjusted in the event of any change in either the price of PAA common units or the price of PNG common units.

If the merger is completed, each PNG common unit outstanding as of immediately prior to the effective time of the merger will be converted into the right to receive 0.445 PAA common units. This exchange ratio was fixed in the merger agreement and will not be adjusted for changes in the market price of either PAA common units or PNG common units. Changes in the price of PAA common units prior to the effective time will affect the market value of the merger consideration that PNG common unitholders will receive in the merger.

The market price of PAA common units has historically varied greatly. For example, during the period beginning on January 1, 2012, and ending on September 30, 2013, PAA common units traded as high as \$59.52 and as low as \$34.74 per unit. The market price of PAA common units is likely to continue to be volatile because of numerous factors, which may include:

quarterly fluctuations in PAA's operating results and those of PAA's competitors;

changes in stock market analysts' estimates of PAA's future performance and the future performance of PAA's competitors;

purchases and sales of a high volume of PAA common units by PAA unitholders;

events affecting other companies that the market deems comparable to PAA;

general conditions in the industry in which PAA operates;

general economic conditions in the United States and other countries;

federal, state and local legislation, governmental regulation and legal developments in the industry in which PAA operates; and

changes in market assessments of the likelihood that the merger will be completed.

The price of a PAA common unit at the effective time of the merger may vary from its price on the date the merger agreement was executed or on the date of the PNG special meeting. As a result, the market value represented by the exchange ratio will also vary. For example, based on the range of closing