



May 20, 2014

Board of Trustees
Pennsylvania Public School Employees' Retirement System
5 North 5th Street
Harrisburg, PA 17101

Re: NGP Natural Resources XI, L.P.

Dear Trustees:

Natural Gas Partners (“NGP” or “the Firm”) is seeking to raise \$4.5 billion of limited partner interests (hard cap of \$5.0 billion) for its eleventh private equity fund, NGP Natural Resources XI, L.P. (“Fund XI” or “the Fund”). The Fund is an extension of the ten prior NGP funds, which have focused on investing in oil & gas production, midstream, and oilfield services companies. NGP is targeting a first closing in September 2014. Investors who participate in closings prior to September 30, 2014 will receive a management fee “holiday”, resulting in management fees charged only on net invested capital until January 1, 2016.

The Fund will provide capital to proven, top-tier management teams to purchase existing oil and gas assets, reduce cost structures and increase volumes in order to create value. NGP looks to partner with “owner-managers” who possess some form of competitive advantage such as a geographic focus, a well-defined technological advantage, a position as a low-cost or high-quality operator, or an early entrant into a developing market. Consistent with prior NGP funds, the Firm intends to invest the majority of the Fund’s capital in North America, but will be opportunistic on a global basis should quality transactions arise. The Fund is expected to make six to ten investments per year at an investment size of \$50 million to \$250 million.

NGP stages its capital into deals over time as needs develop and the company demonstrates progress. This “buy-and-build” approach yields lower loss rates and provides additional capital to successful operators. Post investment, NGP provides its management teams with financial and strategic support as well as access to additional capital in order to grow companies through add-on acquisitions and organic development. Over time, NGP has established itself as a preferred private equity partner in the natural resources sector. As a result, many of NGP’s portfolio company managers operate at least one company through a successful realization event and then go on to form new companies backed again by the same or subsequent NGP funds. Across NGP’s last two funds, more than half of the investments represent repeat management teams.

NGP has approximately 65 employees, 33 of which are investment professionals. The Firm currently has offices in Irving and Houston, TX; Stamford, CT; and Santa Fe, NM. The founding members of NGP have been investing in the North American natural resource sector, with a particular focus on oil and gas, for over 25 years. The Firm’s senior management team is comprised of 15 individuals with total industry experience of more than 320 years and an average tenure at NGP of over 12 years.



Portfolio Advisors' recommendation is based upon the following analytical factors and is made within the context of PSERS' investment guidelines.

- Detailed due diligence, including interviews with industry peers and private equity professionals.
- Evaluation of the composition of the investment team, how they work together, compensation structure and other factors that help determine whether a group is likely to be able to replicate past successes as currently configured.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- The strategy proposed for the Fund is appropriate for the Private Equity Partnership component of the portfolio.

The individuals at Portfolio Advisors who were primarily involved in the due diligence process for the Fund are:

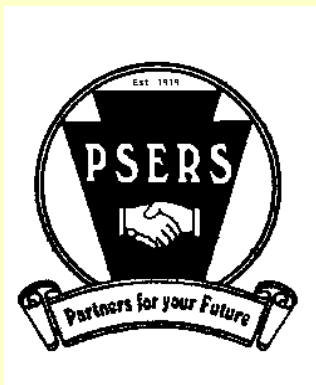
Greg Garrett – Managing Director, Connecticut Office
Geoffrey Kelleman – Senior Associate, Connecticut Office

Based on the above, Portfolio Advisors recommends that PSERS commit to up to \$100 million of limited partnership interests in NGP Natural Resources XI, L.P. Portfolio Advisors makes this recommendation considering the General Partner's qualifications and PSERS' overall investment guidelines.

This recommendation is given solely for the benefit of PSERS and cannot be relied upon by other investors considering an investment in the Fund, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of the Fund. Portfolio Advisors does not provide legal or other non-investment-related advice.

Sincerely,

WILLIAM J. INDELICATO
MANAGING DIRECTOR



Private Equity Fund Commitment

NGP Natural Resources XI, L.P.

June 12, 2014

See Last Page for Disclaimer

Charles J. Spiller, Managing Director,
Private Markets and Real Estate

NGP Natural Resources XI, L.P. – Private Equity Fund

Overview

- The Fund will focus on investing in oil & natural gas production, energy midstream, and oilfield service companies
- NGP expects to invest from \$30 million to \$200 million per transaction
- NGP expects the fund to have 20 to 30 investments
- The Fund has a target of \$4.5 billion and a hard cap of \$5 billion
- The Carlyle Group owns 55% of NGP's revenues but has no influence on the day to day management
- GP is committing \$325 million

Fund Strategy

- NGP typically executes a buy-and-build strategy through its oil and gas production portfolio companies, in which existing production assets are acquired in a series of transactions funded by NGP's equity capital and management team equity, supplemented by third party debt capital. Investment results are primarily driven by the portfolio company management team's ability to operate at lower costs while acting to increase production volumes, cash flows and asset values
- NGP seeks to back portfolio company management teams that have had a successful realization event and then form new companies backed again by NGP. Backing these "recycled management teams" helps to decrease the overall risk profile of the Fund by investing in teams that have already proven themselves

Investment Team

- The founding members of NGP have been investing together for over 25 years
- The current NGP team consists of 60 employees, 33 are investment professionals
- NGP has offices in Irving and Houston, Texas; Santa Fe, New Mexico; and Stamford, Connecticut

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NGP Natural Resources XI, L.P. – Private Equity Fund

GP “Value Add”

- Value is created through improved management of assets, optimization of the capital structure, and increasing volumes of production and reserves
- The Fund will benefit from a substantial portion of its portfolio companies being operated by management teams with which NGP has had prior success
- NGP’s investment team offers an experienced team of capital market transaction specialists, lawyers and tax advisors to help its portfolio companies growth through acquisitions and cash flow reinvestment

Performance (Millions) – As of December 31, 2013

Fund Name	Vintage Year	Commitment	Contributions	Distributions	Valuation	Net Multiple	Net IRR
Fund VI	2000	-	-	-	-	5.5	73%
Fund VII	2003	-	-	-	-	1.7	18%
Fund VIII	2005	-	-	-	-	1.4	8%
Fund IX	2007	-	-	-	-	1.5	15%
Fund X	2012	100.0	46.0	0.7	51.6	1.1	14%

Market Opportunity

- Global demographics such as population growth and more people entering the middle class should intensify growth in demand for energy
- The North American oil and gas industry is highly fragmented which provides very good opportunities for NGP
- Transactions involving oil and gas properties should average between \$70 and \$100 billion annually

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NGP Natural Resources XI, L.P. – Private Equity Fund

History with PSERS

- This will be PSERS second private equity commitment with NGP. PSERS committed \$100 million to NGP X

Risks and Mitigants

- Fund Size – NGP is raising a larger fund by \$1.5 billion, but they have the team that has the ability to invest these amounts
- Well production – NGP layers in their capital based on the production of wells. If an investment is productive then NGP may contribute additional capital
- Oil and gas price volatility – NGP’s portfolio companies purchase hedges during the first 3 years of the expected production for each investment

Board Issues

- Pennsylvania Presence – Rice Energy (Pittsburgh, PA), they employ 145 people there
- Placement agents – NGP retained TCG Securities to assist in preparing marketing materials and soliciting investors for the fund. TCG is an affiliate of The Carlyle Group. NGP will pay them a fee for any new LP that invests in the fund. NGP will pay 100% of this fee (not LPs)
- PA political contributions – None
- Relationship with consultant – Portfolio Advisors has committed \$5 million to Natural Gas Partners VIII, L.P., \$11 million to Natural Gas Partners IX, L.P., and \$20 million to NGP Natural Resources X, L.P.

Recommendation

- Staff, together with Portfolio Advisors, recommends that the Board invest an amount not to exceed \$100 million plus reasonable normal investment expenses

Notice: This document was presented to the Public School Employees’ Retirement Board at the public meeting at which the Board acted on the resolution to which the information relates. The sole purpose for posting the presentation information on this website is to enable the public to have access to documents that were utilized at a public meeting of the Public School Employees’ Retirement Board, and no other purpose, is intended.