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Memo on Quantum Energy Partners VII, L.P.

Motion

That the Nebraska Investment Council (the Council) for the Defined Benefit Plans and Cash Balance Benefit Plans make a \$50 million commitment to Quantum Energy Partners VII, L.P. subject to completion of a legal review and satisfactory agreement of terms.

Background

Quantum Energy Partners, LLC (Quantum) is a Houston-based private equity investment firm. The firm was founded in 1998 by Wil VanLoh and Toby Neugebauer. It is a North American growth equity energy investor. The firm's latest fund offering is Quantum Energy Partners VII, L.P. (Fund VII). Fund VII will be a \$3.5 billion fund with a \$4.5 billion hard cap. The Nebraska Investment Council (the Council) is an LP private equity investor in Quantum Energy Partners V, L.P. (Fund V) and Quantum Energy Partners VI, L.P. (Fund VI). The Council made its \$20 million commitment to Fund V in 2008 and its \$30 million commitment to Fund VI in 2014.

Council Staff (Staff) conducted an analysis of Quantum's investment opportunity. The analysis included various attributes of Quantum, its funds, investment staff, strategy and process, performance, and, finally, terms and conditions. Staff utilized due diligence materials provided by Aon Hewitt Investment Consulting, Inc. (Aon) and Quantum. Staff also reviewed the private placement memorandum for Fund VII. Staff engaged one Quantum Staff on a telephone call in December 2016.

History

- Wil VanLoh and Toby Neugebauer co-founded Quantum in 1998 after being co-founders at Windrock Capital, Ltd. Jeffrey Jones, Director-Geology, and A.V. Jones, Jr., Senior Advisor, have been with the firm since the beginning. Dheraj "D" Verma, now President, who joined the firm in 2008, appears to Staff to be especially strong.
- The firm remained small through Fund I, Fund II and Fund III fund raises. The investment team and its supporting team continue to grow with each fund offering.

Investment Staff

- Since the last fund, staff has grown from 18 investment members to 30 and the administrative staff has grown from 19 in number to 30. The Investment Staff includes 8 members of the Investment Committee, seven of which serve as the Executive Team. There are 15 members of the Transaction Team, five members of the Technical Team/Technical Advisory Committee, four Industry Advisory Board members and four with the Senior Administrative Team.
- The 8 member Investment Committee is comprised of the CEO, the President, 3 Partners, one Senior Advisors and 2 Venture Partners.

Investment Strategy and Process

- Quantum is an energy-only player. Its primary focus is upstream oil and gas with a secondary focus in midstream, power generation and oilfield services. Its core competency is oil and gas plays.
- The firm takes a control approach with North American platform investments in the \$200-500 million size. Fund V has deployed \$5.8 billion in upstream (81%), midstream (13%), services (2%) and power (3%).
- Quantum uses the split between oil (56%) vs. gas (44%) as one diversification tool for the fund.

- Geography is another diversification tool utilized by Quantum. About half of its committed capital can be found in the Delaware Basin; Marcellus/Utica and SCOOP/STACK plays. The rest is in a variety of Texas basins, Canada, California and offshore deals.
- Quantum utilizes the equity line of investing approach, uses repeat management teams for about half of portfolio investments, conservatively structures investments and hedges its portfolios.

Performance

- Funds I, II, III, V and VI are 1st Quartile funds in terms of Net IRR, while Fund IV is a 2<sup>nd</sup> Quartile fund, as of 9/30/16.

	<u>Net IRR</u>	<u>Quartile</u>	<u>Net TVPI</u>	<u>Quartile</u>
Fund I	41%	1st	2.5x	3rd
Fund II	138%	1st	5.2x	1st
Fund III	17%	1st	1.5x	4th
Fund IV	6%	2nd	1.2x	2nd
Fund V	17%	1st	1.6x	1st
Fund VI	89%	1st	1.6x	1st

Terms and Conditions

- There is a fee discount when limited partners close in the first close, the management fee is 1.65% during the investment period, the fee steps down to 1.5% after this period ends. Otherwise, the fee is 1.75% during the investment period then steps down to 1.5%.
- Carried interest is 20% with an 8% Preferred Return.