

COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

Avenue Energy Opportunities Fund II, L.P.

High Yield Commitment

James F. Del Gaudio
Portfolio Manager

May 19, 2017



Recommendation:

Staff, together with Portfolio Advisors, recommends to the Board a commitment of up to \$100 million to Avenue Energy Opportunities Fund II, L.P. ("Fund II" or the "Fund"). Avenue Capital Group ("Avenue" or the "Firm"), a New York-headquartered private investment firm, is sponsoring the Fund to focus on distressed and special situations energy credit opportunities, primarily in North America.

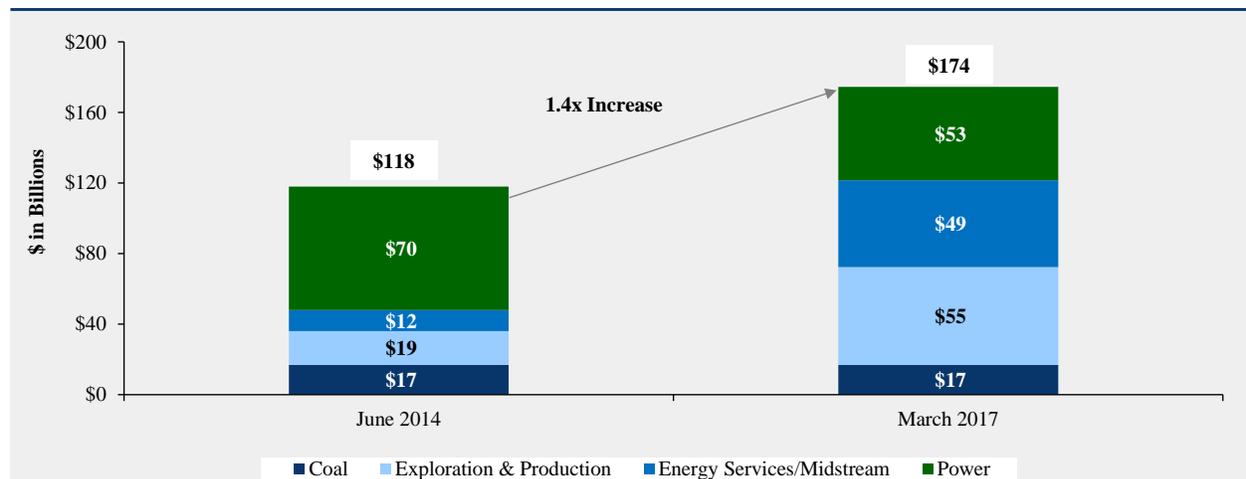
Firm Overview:

Avenue was founded in 1995 by Marc Lasry (Chairman, Chief Executive Officer and Co-Founder of Avenue) and Sonia Gardner (President, Managing Partner and Co-Founder of Avenue) (collectively, the "Senior Principals"). The Firm's primary focus is investing in distressed debt and other special situations investments in the U.S., Europe and Asia. The Firm has ~200 employees (including ~60 investment professionals) as of March 31, 2017, and maintains a well-developed infrastructure with extensive Accounting, Operations, Legal, Business Development, Risk Management, Compliance and Information Technology Departments. Avenue manages a variety of investment vehicles focusing on credit opportunities in the U.S., Europe, and Asia with assets under management ("AUM") estimated to be \$10.3 billion as of March 31, 2017. Avenue Energy Opportunities Fund, L.P. ("Fund I"), Avenue's first dedicated energy and utilities credit-focused fund, closed on ~\$1.3 billion in June 2015, which PSERS previously committed \$200 million. The Fund will be managed by Avenue Capital Management II, L.P. (the "Investment Manager"), which is controlled by the Firm's Senior Principals.

Market Opportunity:

Several factors have created a compelling opportunity for investing in North American energy and utility companies in financial stress or distress. Avenue believes the size of the current distressed universe is being driven by a combination of broad-based weakness in the power sector caused by regulatory changes and lower power prices, and Exploration & Production ("E&P") and Services companies that remain over-levered despite the partial rebound of oil and natural gas prices. The energy sector represents an estimated \$174 billion of leveraged credit, and distressed opportunities have increased over 1.4x since June 2014 (when Fund I was launched) while the prices of energy debt have not recovered to the same extent as high yield.

Distressed Universe



Source: Avenue estimates based on Bank of America Merrill Lynch High Yield Index and Bloomberg, accessed as of March 22, 2017.

Note: While there are many factors in determining whether an investment is considered distressed, generally distressed debt is debt trading with yield to maturity spreads greater than or equal to 1,000 basis points (10%) above comparable Treasuries.

The table following summarizes Avenue's views on the current opportunities that exist across the energy sector within the Fund's strategic focus:



Sector	Opportunity
Power	Avenue believes that investor sentiment in the Power sector is negative as many companies have struggled due to low power prices. Avenue believes that the decline in power prices has been driven by supply surpluses, low demand growth and depressed commodity prices. Avenue expects to focus on investments that will benefit as public-to-private valuations converge due to fundamental market recovery and technology changes (e.g. renewables) that drive value shifts.
Exploration & Production	The latest U.S. Energy Information Administration projection for supply and demand illustrates that higher oil price trends may cause an expansion in U.S. production that could potentially renew volatility in oil prices. Furthermore, debt of over-levered E&P companies remains at distressed levels. Avenue will seek to focus on distressed companies in core basins such as the SCOOP, STACK and Permian, at significant discounts to public/private market values.
Services/Midstream	Onshore service companies have cut capex and reduced costs in order to survive and realize the near-term recovery, while distressed offshore companies continue to work through a series of restructurings ahead of a longer-dated recovery. Avenue intends to purchase debt in distressed companies with high-quality assets and will seek to benefit from price appreciation through balance sheet restructurings that allow value gaps to compress. Avenue expects a fundamental market recovery in the Services/Midstream sector when E&P companies return to offshore projects.

Portfolio Fit:

A commitment to Fund II will be allocated to the Opportunistic bucket of PSERS' High Yield portfolio. As of December 31, 2016, the High Yield portfolio (based on total exposure and including post Q4'2016 pending/closed commitments) was allocated 42% Opportunistic, 36% Senior Loans, 12% Mezzanine and 10% Real Assets. The table below summarizes PSERS' projected exposure inclusive of a recommended \$100 million commitment to Fund II:

Investment Type (\$mm)	Active Commitments ¹	%	Market Value	%	Unfunded ¹	%	Total Exposure ¹	%
Opportunistic	\$ 3,600.0	40.9%	\$ 1,941.0	46.7%	\$ 1,012.2	37.7%	\$ 2,953.1	43.2%
Senior Loans	3,500.9	39.8%	1,309.5	31.5%	1,091.3	40.7%	2,400.8	35.1%
Mezzanine	849.1	9.6%	316.7	7.6%	464.6	17.3%	781.3	11.4%
Real Assets	851.2	9.7%	585.5	14.1%	113.2	4.2%	698.7	10.2%
Total	\$ 8,801.3	100.0%	\$ 4,152.6	100.0%	\$ 2,681.3	100.0%	\$ 6,833.9	100.0%

(1) Include post Q4'2016 pending/closed commitments.

A commitment to Fund II will allow PSERS to continue its relationship with a high-conviction manager that is well positioned to take advantage of ongoing volatility in North American energy and utility markets. The Fund's return target is in-line with PSERS' objective of generating double-digit net returns over the life of the investment.

Investment Strategy:

The Fund's investment strategy is premised on making opportunistic investments in North American energy and utility companies experiencing financial stress or distress. Investments are expected to be made in energy and utility companies that: (1) are undergoing restructuring, reorganization or bankruptcy; (2) are experiencing operational or financial difficulty in which Avenue anticipates a turnaround; (3) are in turmoil; and (4) are undervalued due to discrete extraordinary events. Avenue will continue to pursue a thematic, concentrated investment strategy that is analytically intensive and relies upon individual credit, industry and macro research and analysis. In addition to conducting extensive fundamental credit analysis, Avenue may actively participate on creditors' committees and steering committees. For those companies that require a restructuring (in or out of court), Avenue may seek to influence and/or actively drive the reorganization, bankruptcy or restructuring process. In addition, Avenue may seek board seats on investee companies. That said, Avenue does not typically seek to gain operational control of portfolio



companies. Avenue intends to build a portfolio of 15 to 20 core positions that require ~\$50 million to \$125 million of equity per deal, with 18 to 24 month average holding periods.

Avenue generally prefers energy and utility companies that have infrastructure or other tangible assets with predictable cash flows as these assets may be easier to monetize. Prior to completing an investment, Avenue seeks to fully understand its potential exit, and potential exit strategies are re-evaluated and refined post-acquisition. Historically, exits have been through a sale of the position over time in the open market; however, there are many cases in which partial monetizations occur as a result of required paydowns from such events as asset sales proceeds. The diagram below highlight's Avenue's anticipated portfolio management strategy for Fund II:

	Target Allocations for the Fund*								
Diversify Across Energy Industry	<table border="1"> <caption>Energy Industry Target Allocations</caption> <tr><th>Category</th><th>Allocation</th></tr> <tr><td>Power</td><td>40%</td></tr> <tr><td>E&P</td><td>30%</td></tr> <tr><td>Services</td><td>30%</td></tr> </table>	Category	Allocation	Power	40%	E&P	30%	Services	30%
Category	Allocation								
Power	40%								
E&P	30%								
Services	30%								
While Senior Debt Focused, Opportunistic as Appropriate	<table border="1"> <caption>Debt Target Allocations</caption> <tr><th>Category</th><th>Allocation</th></tr> <tr><td>Senior Debt</td><td>70%</td></tr> <tr><td>Private Opportunities</td><td>20%</td></tr> <tr><td>Junior Debt</td><td>10%</td></tr> </table>	Category	Allocation	Senior Debt	70%	Private Opportunities	20%	Junior Debt	10%
Category	Allocation								
Senior Debt	70%								
Private Opportunities	20%								
Junior Debt	10%								
Optimize Value through Multiple Exit Strategies	<table border="1"> <caption>Exit Strategies Target Allocations</caption> <tr><th>Category</th><th>Allocation</th></tr> <tr><td>Reorganizations</td><td>50%</td></tr> <tr><td>Market Exit/Refinance</td><td>25%</td></tr> <tr><td>Asset Sale/Liquidations</td><td>25%</td></tr> </table>	Category	Allocation	Reorganizations	50%	Market Exit/Refinance	25%	Asset Sale/Liquidations	25%
Category	Allocation								
Reorganizations	50%								
Market Exit/Refinance	25%								
Asset Sale/Liquidations	25%								

*The information contained herein is based on Avenue's reasonable assessment of how it may construct the Fund's portfolio and does not represent actual investment allocations and is subject to change. The above attributes and anticipated exposures are not investment guidelines or restrictions; the Fund could have materially different attributes and exposures. The information provided should not be relied upon as an indicator of future results or used as the basis for investment decisions. There is no assurance that Avenue will be able to construct a portfolio similar to what is presented herein, that such a portfolio will achieve its investment objective, execute on its expected exit strategy, or that it will make any profit, or will be able to avoid incurring losses.

Investment Structure:

Avenue seeks to invest in energy and utility companies and assets at what it believes to be significant discounts to both public and private valuation multiples. Avenue seeks attractive risk-adjusted returns by primarily investing in senior secured debt or other instruments that are structurally senior to other portions of the capital structure. However, as market cycles evolve and/or the Investment Manager's investment thesis on a company progresses, the Fund may opportunistically invest in more junior portions of the capital structure, including post-reorganization equity and other equity investments when available, depending on the risk/return profiles of an investment. Investment returns also benefit from the capital appreciation that occurs upon re-adoption of bonds and bank debt by the high yield or near-par bank debt markets. Avenue seeks to generate ~20% gross returns for the Fund (~15% net) and does not intend to employ fund-level leverage to enhance returns. Avenue also intends to fully recycle principal distributions (~2x committed capital) during the Fund's three-year investment period to enhance returns, as evidenced in Fund I where the Investment Manager has already recycled ~68% of commitments to date.



Investment Instruments:

The table below provides a summary of the principal investment instruments the Fund will use to implement its opportunistic investment strategy:

Instrument	Description
Senior Debt	Avenue expects to focus primarily on individual corporate, distressed securities with an emphasis on maximizing risk-adjusted, equity-like returns through the purchase of senior debt instruments. Avenue believes that senior debt instruments may produce attractive current yields, moderate volatility and help to insulate the portfolio against economic uncertainty. Additionally, Avenue believes investing in the senior-most part of the capital structure minimizes the priming risk of becoming structurally subordinated.
Junior Debt	In select situations, Avenue may invest in more junior portions of the capital structure depending on the risk/return profiles of an investment. Typically, junior debt investments are expected to be made alongside senior debt investments or made to move down the capital structure after investment risk has been reduced.
Private Opportunities	Avenue will utilize its extensive network of relationships to invest in private companies and individual assets through secured debt or equity. Such investments are mostly in distressed capital structures or purchased as part of an auction of assets from distressed companies.

Investment Team:

Avenue is led by Marc Lasry and Sonia Gardner who each have 30+ years of experience investing in distressed debt markets. Matthew Kimble, who has been at Avenue for 14 years, is the lead Portfolio Manager responsible for directing the investment activities of the Fund under the supervision of the Senior Principals. Avenue's U.S. investment team, based in New York, is comprised of 17 investment professionals; six of whom are focused on the energy and utility sectors.

The Fund's investment team generally meets once a week and meetings typically cover an overview of the markets, recent or upcoming economic announcements, recent developments in relevant credit names, and upcoming earnings announcements and conference calls. Outside of these informal meetings, there is frequent and ongoing interaction among the members of the investment team. Given the opportunistic nature of the Firm's investment strategy, the decision to transact (i.e., investment decision) generally lies with the applicable fund's portfolio manager (i.e. Matthew Kimble in the case of energy). Therefore, the Firm's U.S. Investment Committee ("IC") functions in more of an oversight capacity as opposed to approving individual transactions. IC meetings are held at least quarterly, but generally monthly, and typically include a review of portfolios, largest investments, marketplace developments, legal/regulatory updates, review of personnel changes and any other items that are relevant to the applicable fund's portfolio. In addition to the six investment professionals listed in the table below, the Firm's IC is comprised of additional members of the Firm's senior management who bring a mix of risk, legal, compliance, business development and tax expertise.

The table below highlights the sector focus and experience of the Firm's the Senior Principals, the Fund's dedicated investment professionals, and Avenue's additional U.S. investment professionals who sit on the Firm's IC:

Name	Title	Sector Coverage	Total Years at Avenue	Total Years of Relevant Experience	Previous Professional Experience
Marc Lasry*	Chairman, CEO & Co-Founder	Generalist	22	33	Amroc, Robert Bass Group, Cowen & Company, Smith Vasilou
Sonia Gardner*	President, Managing Partner & Co-Founder	Generalist	22	31	Amroc, Robert Bass Group, Cowen & Company
Matthew Kimble*	Portfolio Manager	Energy	14	17	Bellport Capital Advisors, Gordian Group, IBM



Name	Title	Sector Coverage	Total Years at Avenue	Total Years of Relevant Experience	Previous Professional Experience
Craig Hart	Managing Director	Energy	3	18	U.S. Power Generating Company, PA Consulting Group
Stephen Burnazian	Senior Vice President	Energy	12	17	CRT Capital Group, Sheffield Merchant Banking Group, FCA Corp
Jason Hammerman	Vice President	Energy	9	12	Jefferies & Company
San Lo	Vice President	Energy, Financials	7	9	Moelis & Company
Kiran Ramineni	Vice President	Energy	3	10	U.S. Power Generating Company, Hold Brothers Capital, AJ Capital
Shawn Foley*	Senior Portfolio Manager	Generalist	9	26	Merrill Lynch, Baker Nye Greenblatt
Jane Castle*	Portfolio Manager	Generalist	9	20	Lehman, Citigroup
Richard Furst*	Chief Investment Officer, Head of Europe Strategy	Generalist	13	29	Moore Capital, BoA, Salomon Brothers

* Denotes Investment Committee member.

Investment Highlights:

Experienced & Cohesive Team focused on the U.S. Energy and Utility Sectors

Avenue is led by Marc Lasry and Sonia Gardner who formed Avenue 22+ years ago and each have 30+ years of experience investing in distressed debt markets. Avenue has been a participant in the U.S. energy and utility sectors since 1997 with over \$10 billion invested in this space. Matthew Kimble, who has been at Avenue for 14 years, is the Fund's lead Portfolio Manager and is supported by five additional dedicated investment professionals who have all been with the Firm since the inception of Fund I. Avenue's energy team sits within the Firm's broader 17-person U.S. investment team, based in New York, and can leverage the Firm's global platform from both a strategic and operational perspective. The energy team has not experienced any departures to date.

Energy Track Record

Avenue has been a participant in the U.S. energy and utility sectors since 1997 with over \$10 billion in investments, including \$1.9 billion total invested capital from Fund I (inclusive of recycling). Avenue Combined Funds' historical energy and utilities investments have generated an 18.1% gross return since inception through December 31, 2016. As of December 31, 2016, Fund I, a 2014 vintage-year fund, generated a 23.0% gross IRR (17.9% net to PSERS) and a 1.28x gross MOIC (1.24x net to PSERS). As of December 31, 2016, Fund I has a loss ratio of 6.6%¹ and has recycled approximately 68% of its committed capital.

Pipeline of Actionable Investment Opportunities

Avenue has identified a distressed universe of over 110 companies with over \$170 billion of liabilities² as the prices of distressed energy debt have not recovered to the same extent as energy credits included in the high yield energy index. As discussed above (see *Market Opportunity*), distressed opportunities have increased over 1.4x since June 2014 (when Fund I was launched). Furthermore, prices of these distressed credits are trading at over a 40% discount from the time Avenue launched Fund I. Of the companies in Avenue's distressed universe, only 21 issuers are companies included in the high yield energy index as a majority of Avenue's targets are loans or issues that exited the index due to default, or are power and coal issuers that are not included in the index. E&P bankruptcies have also accelerated during 2016 and Avenue expects to see this trend continue, leading to additional investment opportunities for the Fund.

(1) "Loss Ratio" For each issuer, "Issuer Total Gain/Loss" is the sum of realized gain/loss, unrealized gain/loss, interest and dividends. The Loss Ratio is defined as the ratio of a) the sum of "Issuer Total Gain/Loss" for all issuers where such value is a negative number to b) total invested capital, which, where applicable, includes recycled proceeds and is may be a larger number than the fund's committed capital.

(2) Avenue estimates based on Bank of America Merrill Lynch High Yield Index and Bloomberg, accessed as of March 22, 2017. While there are many factors in determining whether an investment is considered distressed, generally distressed debt is debt trading with yield to maturity spreads greater than or equal to 1,000 basis points (10%) above comparable Treasuries.



Investment / Risk Considerations:

Competition from other Distressed Investors

There is no question that competition exists for distressed energy credit opportunities. Avenue will be competing for investment opportunities with a significant number of financial institutions and other private funds as well as various institutional investors; some of which are larger and have greater resources than Avenue. It is also worth noting that a number of other generalist private investment managers have suggested that the broad-based distressed energy credit opportunity has largely diminished. That said, Avenue has been a participant in the U.S. energy and utility sectors since 1997 (across market cycles), with over \$10 billion invested in this space. Furthermore, Avenue is does not intend to increase the size of Fund II from Fund I; targeting ~\$1 billion in commitments which is actually less than the \$1.3 billion raised for Fund I. This should eliminate the risk of having to put too much capital to work and allow Avenue to continue to focus on idiosyncratic opportunities offering compelling risk/return characteristics.

Commodity Price Volatility

Investment performance may be substantially dependent upon prevailing prices of oil and natural gas. Historically, the markets for oil and natural gas have been volatile, and such markets are likely to continue to be volatile in the future. Prices for oil and natural gas are subject to wide fluctuation in response to relatively minor changes in the supply of and demand for oil and natural gas, market uncertainty, speculation and a variety of additional factors that are beyond the control of Avenue. This volatility was evident in the progression of Fund I's returns, having commenced investing in late-2014 prior to the commodity price decline of 2015. Fund I was marked as low as 0.82x gross multiple (0.81x net) as of March 2016 when the Fund was approximately 74% drawn, rebounding to a high of 1.37x gross multiple (1.27x net) estimated as of February 2017 when the Fund was fully drawn and is currently marked at 1.28x gross multiple (1.20x net) estimated as of March 2017. It is worth noting that while commodity price volatility impacted Fund I performance on a mark-to-market basis, it did serve as a catalyst to creating a majority of the fund's investment opportunities given Avenue's opportunistic approach. Additionally, the Fund's long-term, locked-up capital allows Avenue to capitalize on these fundamental market dislocations by properly aligning the investment period with the opportunity while allowing for dynamic adjustment of the portfolio.

While commodity price volatility has impacted Fund I's interim returns, largely due to mark-to-market requirements, Avenue's strategy is not predicated on commodity prices driving ultimate returns. Avenue's strategy is focused on three sectors (E&P, Services, and Power) so while oil prices have driven high yield / leveraged loan pricing across the space, only 47% of Fund I's portfolio was invested in E&P. In services (22% of Fund I's portfolio), commodity prices can impact the level of activity but does not impact revenues. In power (29%), there is little direct correlation to oil prices but natural gas prices do influence power prices in many regional markets. In many cases, Avenue's strategy is to take companies through a restructuring and when this occurs, correlation to commodity prices should decline as the restructuring plan becomes the catalyst for final investment return. This is evidenced by a number of positions that have gone through restructuring whose securities moved up in price significantly despite a lack of recovery in oil prices. It is also worth mentioning that Avenue does not incorporate commodity price improvement in their base case return estimates, however, higher prices could add incremental return.

Distressed Sector Concentration / Reorganization Risk

Given the nature of the Investment Manager's strategy, the exposure of the Fund will be highly concentrated in stressed/distressed energy and utility companies. Furthermore, the Fund will invest in securities of companies involved in bankruptcy or other reorganization and liquidation proceedings (Avenue expects ~50% of the Fund's investments to go through some form of restructuring process). Many of these securities typically remain unpaid unless and until the company reorganizes and/or emerges from bankruptcy proceedings. Although such investments may result in significant returns to the Fund, they involve an element of binary risk and may not show any return for a considerable period of time, if at all. It should be noted, however, that reorganizations have contributed an estimated \$151 million of gains in Fund I as of March 31, 2017.

Somewhat mitigating this risk is the fact that Avenue typically seeks to structure investments at what it believes to be significant discounts to both public and private valuation multiples and primarily invests in senior secured debt or other instruments that are structurally senior to other portions of the capital structure. Avenue believes that being structurally senior in the capital structure provides protection from downside losses due to having a priority position on the underlying collateral. In a company that undergoes a restructuring, senior debt holders can either be reinstated at par or converted into equity. In situations where senior debt is converted to equity, junior debt holders often receive significantly diminished recoveries. In addition, senior debt positions have less risk of being "primed" or "layered" behind debt issuances which can cause a significant diminution in collateral and, ultimately, recovery value. Another mitigant to this risk is strong portfolio construction and diversification which Avenue should be able to achieve given its multi-sector focus on E&P, Services, and Power.



Liquidity & Leverage Profile

The Fund is expected to be invested within three-years of its final closing (the "Investment Period"), with the ability to fully recycle proceeds within this period. After the Investment Period, the Fund will have a two-year harvesting period in which to realize investments. Avenue will not employ fund-level leverage to enhance returns.

PSERS History & Performance:

Since 2000, PSERS committed ~\$2.2 billion to 12 Avenue-managed partnerships. As of December 31, 2016, Avenue generated a 13.8% net IRR and a 1.39x net MOIC for PSERS across their Special Situations/High Yield funds. The table below summarizes PSERS' historical performance with Avenue by partnership:

Fund (\$mm)	Portfolio	Vintage	Commitment	Contributions	Distributions	NAV	Net IRR	Net MOIC
Avenue Energy Opportunities Fund	HY	2014	\$ 200.0	\$ 186.2	\$ 0.0	\$ 231.7	17.9%	1.24x
Avenue Europe Special Situations Fund III	HY	2015	200.0	101.2	0.0	108.3	7.2%	1.07x
Avenue Europe Special Situations Fund	SS	2008	210.9	259.7	360.2	1.6	12.2%	1.39x
Avenue Special Situations Fund VI	SS	2010	75.0	76.9	56.0	28.2	2.3%	1.10x
Avenue Special Situations Fund V	SS	2007	300.0	301.1	394.0	4.9	11.1%	1.32x
Avenue Special Situations Fund IV	SS	2006	115.0	144.8	188.1	1.9	8.4%	1.31x
Avenue Special Situations Fund III	SS	2002	205.2	148.9	255.8	-	18.5%	1.72x
Avenue Special Situations Fund II	SS	2000	125.0	125.4	198.4	-	19.2%	1.58x
Avenue Asia Special Situations Fund IV	SS	2006	300.0	225.1	215.9	25.0	1.5%	1.07x
Avenue Asia Special Situations Fund III	SS	2003	100.0	76.3	114.4	-	8.4%	1.50x
Avenue Asia Special Situations Fund II	SS	2001	220.0	220.0	413.3	-	21.5%	1.88x
Sub-Total (Private Debt & High Yield)			\$ 2,051.1	\$ 1,865.7	\$ 2,196.2	\$ 401.6	13.8%	1.39x
Avenue Real Estate Fund (Parallel)	RE	2006	100.0	94.2	21.2	67.5	(0.7%)	0.94x
Total (Avenue Capital Group)			\$ 2,151.1	\$ 1,959.9	\$ 2,217.4	\$ 469.1	12.6%	1.37x

Finance Committee Disclosure:

Relationship with Portfolio Advisors, LLC:	Avenue Special Situations Fund IV PAPEF III: \$10mm Avenue Special Situations Fund V PAPEF VI: \$15mm PAPEF VII: \$15mm
Introduction Source:	Fund Sponsor
Placement Agent:	None used for PSERS. The Investment Manager has engaged Citigroup Global Markets Limited in connection with the offering and sale of limited partnership interests in Avenue Energy Opportunities Fund II, L.P. (the "Fund"); targeting non-U.S. prospective investors. The Investment Manager may consider future engagements with other placement agents, if needed.
PA Political Contributions:	None Disclosed
PA Presence:	Yes
Potential Conflicts:	We are not aware of Avenue having any investment conflicts.
First Time Fund With PSERS:	No
PSERS AIC Approval:	May 10, 2017



Oversight Responsibility:

Investment Office:	Charles J. Spiller Deputy CIO, Non-Traditional Investments James F. Del Gaudio Portfolio Manager
External Consultant:	Portfolio Advisors, LLC



May 9, 2017

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

Re: Avenue Energy Opportunities Fund II, L.P.

Dear Trustees:

Avenue Capital Group (“Avenue” or the “Firm”) is seeking to raise \$1.0 billion (\$1.3 billion hard-cap) for Avenue Energy Opportunities Fund II, L.P. (“Fund II” or the “Fund”) to make investments primarily in debt, select equity securities or other obligations of North American energy and utility companies in financial stress or distress. Avenue has been a participant in the U.S. energy and utility sectors since 1997 with over \$10.0 billion invested in this space. Avenue held a first close in May 2017 on approximately \$110 million and will have subsequent closings the remainder of the year.

Investments are expected to be made in energy and utility companies that: (i) are undergoing restructuring, reorganization or bankruptcy; (ii) are experiencing operational or financial difficulty in which Avenue anticipates a turnaround; (iii) are in turmoil; and (iv) are undervalued because of discrete extraordinary events. Investments are expected to focus primarily on individual corporate, distressed debt securities and other special situations investment opportunities and are generally expected to be made in senior secured debt or other instruments that are structurally senior to other portions of the capital structure. The Fund may also invest in more junior portions of the capital structure, including equities, depending on the risk/return profiles of an investment. Avenue generally prefers energy and utility companies that have infrastructure or tangible assets with predictable cash flows as these assets are typically easier to monetize quickly and at market value. Avenue’s goal is to select investments within the energy and utility sectors that are undergoing periods of rapid change and/or deterioration. Avenue believes current market dislocations have created attractive investment opportunities across Exploration & Production, Services/Midstream, and Power. Avenue anticipates Fund II’s target sector allocations to be 30% in E&P, 30% in Services/Midstream, and 40% in Power.

The Fund will follow a strategy similar to that used by the Firm’s U.S. distressed debt funds of pursuing a theme-driven, concentrated investment strategy that is analytically intensive and relies on individual credit and industry research and analysis. It is a value oriented investment strategy based on proprietary research and comprehensive due diligence that seeks to uncover hidden value and/or risk, thereby increasing potential returns and reducing the risk of losses. The depth of experience of its professionals allows for thorough research and active portfolio management of investments, including those with complicated, multi-layered capital structures. In addition to conducting fundamental credit analysis, Avenue may actively participate on creditors’ committees and steering committees. For those companies that require



restructuring, Avenue often seeks to influence and/or actively drive the reorganization, bankruptcy or restructuring process. Although the Firm may play an active role, Avenue typically avoids taking operational control of portfolio companies due to the additional risks involved in turnaround situations.

Portfolio Advisors' recommendation is based upon the following analytical factors and is made within the context of Commonwealth of Pennsylvania Public School Employees' Retirement System's ("PSERS") investment guidelines.

- Detailed due diligence, including interviews with industry peers and private equity professionals. The on-site due diligence visit was performed on February 9, 2017.
- 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 Opportunistic portion of the High Yield portfolio.

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

William Indelicato – Managing Director, Darien Office

Lenis Leung – Vice President, Darien Office

Based on the above, Portfolio Advisors recommends that PSERS commit to up to \$100 million in Avenue Energy Opportunities Fund II, 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