



PSERS PRIVATE INVESTMENT PROGRAM

Recommendation for Investment in First Reserve Fund XI, L.P.

Charles J. Spiller
Director of Alternative Investments

June 8, 2006

FIRST RESERVE FUND XI, L.P.

EXECUTIVE SUMMARY

First Reserve Corporation ("First Reserve" or the "Firm") is forming First Reserve Fund XI, L.P. ("Fund XI" or the "Partnership") primarily to make privately negotiated equity and equity-related investments in a diversified portfolio of companies in the global energy industry. The Partnership is seeking total committed capital of \$5.5 - \$7.0 billion. Throughout its 23-year history, First Reserve has developed a strong franchise of investing exclusively in the energy industry, utilizing its broad base of specialized industry knowledge as a competitive advantage. In ten previous funds, the last five of which have been buyout-focused funds, First Reserve has invested in over 100 entities, more than 60 of which have been platform companies for further acquisitions. First Reserve also has participated in more than 225 add-on acquisitions for these portfolio companies. Throughout its history, First Reserve has actively diversified its equity investments across different segments of the energy industry. Active diversification has allowed First Reserve to invest successfully in all commodity price environments and during both expansionary and recessionary economic periods. First Reserve differentiates itself by utilizing its industry knowledge to develop early macro views across diverse segments of the worldwide energy industry. As a result, First Reserve has a first mover advantage in investment generation, selection and processing.

First Reserve is the oldest and largest private equity firm to focus exclusively on investing in a diversified portfolio of energy companies. First Reserve's buyout-focused funds have been consistent top performers both within the energy sector and within buyout funds generally. The time and market-tested investment and sales discipline of the First Reserve team, combined with its extensive experience in the energy sector and access to proprietary deal flow, has yielded a 31% gross compound annual internal rate of return ("Gross IRR") on its realized investments over the 14-year history of investing its five buyout-focused funds.

The worldwide energy industry presents great investment opportunities for its limited partners. First Reserve continues to have the elements necessary for success in this industry: a unique team with decades of experience in energy investing, operating expertise in a broad array of energy businesses, access to capital, strong proprietary deal flow and a disciplined investment and sale process. First Reserve's deep industry knowledge is the foundation for its ability to recruit top quality management teams and develop value-building growth strategies.

Energy Sector Ideal for Experienced Buyout Investor

The worldwide energy market is growing and is very capital intensive. The world's developed economies are in the process of expanding and upgrading their existing energy infrastructure, and the emerging countries require the development of a modern energy infrastructure to serve their increasing needs for energy. It is estimated that the world will require over \$16 trillion dollars to maintain and replace existing energy supply and to expand global capacity to meet projected energy demands in 2030. This highly diverse industry ranges from the exploration and development of the hydrocarbons themselves through the processing and transportation required to deliver energy and power to the consumer. There are many factors and trends driving the energy sector and its many component markets, such as economic growth, consumer demand for energy, capital spending, new technologies and deregulation. These complex factors create a dynamic industry with various economic and business cycles. First Reserve has successfully demonstrated that one segment of the industry can be expanding and appropriate for new investment, while another is peaking and ripe for realization. First Reserve's singular focus on the global energy industry, its longstanding experience in that industry and its access to the capital markets permit it to anticipate and react to changing

market conditions in different segments of the industry. First Reserve's understanding and anticipation of macro energy trends has led to the development of successful themes in the portfolio. By capitalizing on these themes, before they have necessarily become apparent to the market, First Reserve has gained a first mover advantage and achieved superior returns. For example, First Reserve developed the macro view that natural gas prices would increase to a level that would create increased demand and thus made early investments in LNG and coal.

Investment Approach and Strategy

Through its 23-year history of private equity investment in the energy business, First Reserve has developed expertise in identifying emerging trends in the global energy industry and the ability to generate substantial proprietary deal flow to capitalize on those trends. More than 75% of the current portfolio investments held at December 31, 2005 by the Equity Funds arose from proprietary transactions utilizing the Firm's franchise position within the energy industry. Based on its internal industry research, First Reserve actively initiates transactions with market participants to capitalize on developing industry trends.

First Reserve often recycles successful management teams from past portfolio companies as board members, advisors, CEO's and CFO's of new investments. These lasting relationships are an important competitive advantage and a legacy of the Firm's decades of experience in the industry.

First Reserve has an extremely effective and sophisticated capital markets function, but the Firm's philosophy is not to over-leverage its portfolio investments, as that may hinder managements' ability to implement their strategy in an effective and timely manner.

Fund XI generally will target equity investments of \$100 million to \$500 million in global energy companies with enterprise values of \$300 million to \$4 billion. Consistent with First Reserve's longstanding strategy, the companies will generally have proven management teams, significant growth potential, strong market positions and multiple exit opportunities. Many investments will be focused on companies in which First Reserve will have significant influence through the Fund's ownership position and board representation. Other investments, particularly those in less-traditional sectors of the energy industry or in emerging markets, may be structured so that First Reserve will work closely with an experienced industry or regional partner. With respect to all investments, First Reserve will bring to bear its industry and strategic expertise.

As in prior successful funds, Fund XI will continue to focus on the broad worldwide energy industry. Fund XI plans to make investments that capitalize on its primary investment themes, including the underinvestment in worldwide infrastructure, the increasing importance of natural gas and natural gas-related products (LNG and coal) and the increasingly global nature of the energy industry. First Reserve believes that manufacturing and service companies operating in the worldwide oil and natural gas, infrastructure and power sectors present particularly attractive investments for executing on these themes, and some of the best opportunities for First Reserve to execute its overall strategy of "building value by building companies," creating value through add-on investments, sector consolidations, cost reductions and improved marketing and distribution.

As First Reserve has successfully done in the past, Fund XI will also target Energy Reserve acquisitions in situations where there are significant capital appreciation opportunities in the underlying assets. The Firm focuses on geographically concentrated reserves with long production lives, which will generate future interest from strategic buyers or the capital markets. Traditionally, First Reserve has focused its reserve investments in the natural gas and coal sectors.

Renewable energy investments are expected to be more evident in Fund XI's portfolio. Although First Reserve has invested in renewable energy and emissions-related service and manufacturing companies in prior funds, the renewable energy segment of the energy industry has matured to the point where investment opportunities will be larger and, therefore, will be more prominent in the portfolio.

Fund XI Investments

Fund XI will pursue the same investment strategy that First Reserve employed to achieve the investment success of its prior Equity Funds. First Reserve anticipates that the majority of investments will be in Energy Manufacturing and Service companies that both maintain existing infrastructure and participate in new infrastructure development. The Firm also anticipates that Fund XI will have increased exposure to large assets in the Energy Infrastructure segment. The balance of Fund XI is expected to be in Energy Reserves. The typical holding period for First Reserve portfolio companies has been three to six years, and it is anticipated that the holding period for Fund XI investments will also generally be in that range. Generally, manufacturing and service investments are held for longer periods than reserve-related investments.

In summary, First Reserve expects that Fund XI will build upon the Firm's proven strategy, substantial experience and long-established success in global energy. Fund XI provides an attractive investment opportunity for the following reasons:

- *Excellent, Long-Term Investment Record.* First Reserve is the oldest and largest buyout group to focus exclusively on a strategy of energy investments across a broad range of global energy industry sectors. Since 1992, the First Reserve team has invested \$3.5 billion through its five energy buyout-focused Equity Funds. As of December 31, 2005, these Equity Funds have generated a cumulative Gross IRR of approximately 31%.
- *Experienced, Cohesive Investment Team.* The senior management team of First Reserve has worked together in various capacities for over 17 years. They have demonstrated their ability to work together to generate significant returns for their investors over this extended period of time and through varied industry and economic conditions. First Reserve's investment team has experience investing and operating in a variety of the world's geographic regions within a wide range of energy industry sectors, including manufacturing and service, infrastructure, exploration and production, midstream and downstream operations, distribution and marketing, coal production, power generation, renewable energy and emissions-related infrastructure and equipment.
- *Breadth of Energy Coverage.* First Reserve invests throughout the world in a broad range of segments within the energy industry including: (i) Energy Manufacturing and Service, such as drilling rigs and equipment and wellhead equipment manufacturers, engineering and construction contractors, firms that perform power line maintenance and repair and companies that install and repair renewable energy infrastructure and systems; (ii) Energy Infrastructure, such as pipelines, natural gas processing facilities, refineries, product terminals and electric generating assets; and (iii) Energy Reserves, such as natural gas, oil and coal. Investing in a broad range of energy industry segments also may involve other natural resources, such as minerals. Investing across sectors and across geographic regions creates balance in First Reserve's portfolio and smoothes out earnings and revenues across the portfolio.
- *Attractive Investment Fundamentals.* Fund XI will be invested and harvested in an industry environment with attractive investment fundamentals created by strong and increasing worldwide energy demand. For example, global oil demand has been

growing by 1.7% per year for the last 20 years and is forecast to grow at 1.4% for the next 25 years. Excess production capacity no longer exists to meet this demand. Therefore, this growth will require increased investment across the energy industry. First Reserve will continue its investment theme to capitalize on the need for increased Energy Infrastructure spending to replace aging infrastructure in developed economies and to install modern infrastructure in emerging markets.

- *Proactively Generated Deal Flow.* As a result of First Reserve's long history of investing exclusively in the energy industry, First Reserve has developed an extensive network of relationships. These relationships produce the majority of First Reserve's deal flow. Potential transactions are generated through First Reserve's intensive research on macro-industry trends and specific companies, its long-standing industry partners and other personal relationships within the energy industry, and its membership on boards of portfolio and energy industry companies. This combination of internal research and industry contacts enables the Firm to be an early investor in the consolidation of the Energy Manufacturing and Service sector (such as its investments in National Oilwell, Weatherford and Superior Energy Services) and to be well-positioned to acquire non-core divisions from corporations as the industry continues to consolidate (such as its acquisitions of Dresser, Inc. and Power Well Services from Halliburton and Dresser-Rand from Ingersoll-Rand). First Reserve also looks at companies being offered at auction and, in certain cases, participates in those auctions. First Reserve's participation in auctions, however, most often involves some situation which the Firm believes gives it a competitive advantage. As an example, First Reserve's participation in the sale process for Chart Industries was driven by the belief that Chart had significantly greater growth potential in its energy-related cryogenic business (critical to LNG operations) than was being forecast. In over 23 years of investing, First Reserve's access to proactively generated proprietary deal flow, as well as other deal flow, has offered a large pool of deals from which to select the most attractive investments.
- *Detailed Investment Review and Monitoring Process.* Investments at First Reserve generally undergo a rigorous documentation and review process which enables First Reserve to analyze the value and potential of each deal, to monitor existing portfolio investments and ultimately to decide the optimal time to sell its position. Portfolio investments are discussed weekly at the staff meeting and undergo a robust review semi-annually to check the company's positioning and performance against industry fundamentals and trends and to evaluate exit timing.
- *Disciplined Exit Strategy.* First Reserve has a disciplined exit strategy, which is critical to its consistent track record. While disciplined, the exit strategy is flexible enough to recognize changes in the macro environment and capital markets and to act on them in a timely manner. A portfolio company exit strategy is established when entering into every investment, with price/value targets revised in a formal portfolio review twice a year thereafter. Exits typically are from sales to strategic buyers or sales through the public securities markets. Over First Reserve's history, the majority of exits have been sales to strategic buyers; however, in 2005, the majority of exits were IPO's, proving First Reserve's ability to be adept at taking advantage of market opportunities and valuations. First Reserve's capital markets expertise enables it to select the optimal exit strategy at the ideal time and to act quickly to take advantage of market opportunities on behalf of its investors. This discipline has been instrumental in building First Reserve's favorable and consistent realization record.
- *Distinctive Investment Philosophy.* A single industry focus for decades has produced a deep knowledge of the worldwide energy industry and is a tremendous competitive

advantage for First Reserve. The energy industry is complex and requires specialized knowledge, skills and relationships. As one of the first private equity firms to concentrate on a single industrial sector, First Reserve invests in and builds companies based on opportunities created by specific energy industry trends. First Reserve has developed an expertise in identifying emerging energy trends before they are necessarily apparent to other financial players. Particular emphasis is placed on companies perceived to have exceptional growth prospects. Growth capital provided by First Reserve should enable solid companies to outperform in periods of industry expansion and to have the financial strength to survive and make reasonably priced strategic acquisitions during industry downturns.

Investment Strategy

First Reserve intends to apply the same successful investment approach in Fund XI that its investment team pursued in the prior Equity Funds. The key components of this strategy include:

- *Capitalizing on opportunities created by industry trends.* The energy industry is the largest industry segment in the world, with many diverse sectors and considerable acquisition and divestiture activity. The individual sectors of the energy industry do not march in unison. At any one time, some sectors will be out of favor while others will be overvalued. First Reserve routinely evaluates the entire industry to determine which sectors might offer the best value for new investments based on improving industry fundamentals, new or improved technologies, cost reductions, marketing improvements, changes in government regulation or strategic changes by key industry participants. First Reserve seeks to identify sectors with an improving outlook in advance of other investors and to establish strategic positions, often in niche markets, before acquisition multiples become excessive. Examples of First Reserve's ability to identify attractive, but out of favor, sectors on a timely basis include its moves into (i) the Oilfield Service sector in the late 1980s and early 1990s, (ii) U.K. gas reserves in 2000 and 2003, (iii) worldwide LNG in 2001 and 2005, (iv) power transmission service in 2002 and (v) coal in early 2003. With Fund XI, First Reserve expects to initially focus on worldwide energy infrastructure, natural gas driven investment themes and emerging trends in Energy Infrastructure, such as outsourcing by utilities, repair and maintenance opportunities for an aging installed base and divestitures by utilities and integrated energy companies. All of these will be looked at in the context of an increasingly globalized energy industry, with countries such as China and India becoming major consumers of energy and energy infrastructure. In addition, renewable energy infrastructure assets are expected to be more prominent in Fund XI's portfolio as compared to the prior Equity Funds.
- *Diversification within the energy industry.* First Reserve believes diversification of investments across a wide range of energy industry sectors enhances portfolio returns, stabilizes deal flow, enables consistent distributions and reduces risk. First Reserve invests in a broad range of segments within the energy industry including: (i) Energy Manufacturing and Services, such as drilling service providers and wellhead equipment manufacturers; (ii) Energy Infrastructure, such as firms that engineer LNG and natural gas processing facilities or install and repair electric transmission systems; and (iii) Energy Reserves, such as natural gas and coal producers.
- *Proactive origination of transactions.* With over 280 years of combined investment experience in the energy industry, First Reserve has established an extensive network of company executives, consultants, investment bankers, strategic partners and other energy industry participants who frequently bring transactions to First Reserve and who

First Reserve utilizes for investment leads. First Reserve sees most, if not all, of the companies being offered in auctions by bulge-bracket investment banks, the vast majority of its transactions over the past 14 years have originated from its own network as privately negotiated transactions, including Alpha Natural Resources, Cal Dive, Chicago Bridge & Iron, Dresser-Rand, Foundation Coal, National Oilwell, Patina Oil & Gas, Pride International and Superior Energy Services.

- *Disciplined acquisition analysis.* First Reserve's due diligence efforts are conducted by the Firm's staff with outside assistance from expert consultants. All important aspects of a potential transaction are examined in detail. Particular attention is focused on the target company's strategy, prospects for growth and potential exit options. Once this effort is completed for initial investments, First Reserve's research is summarized in a comprehensive board book which describes the company and the investment rationale, identifies important risks, possible upsides and issues to be resolved and provides pro-forma financial projections at various acquisition prices. This extensive analysis is prepared on every investment and forms the basis for both First Reserve's evaluation of the company and its negotiations with the seller.
- *Active management of portfolio holdings to maximize post-investment value.* Because of First Reserve's experience in the energy sector, the Principals have significant experience in managing operations of the First Reserve Portfolio Companies and in assisting the managements of Portfolio Companies with developing their growth strategies and identifying, negotiating, financing and completing transactions, as well as in realizing the acquisition benefits associated with cost reduction and revenue enhancement initiatives. First Reserve generally appoints First Reserve executives and, where appropriate, outside industry experts to the boards of directors of portfolio companies. First Reserve also works with its management teams to formulate strategy, expand product offerings, capture cost reductions, improve capital structures and take advantage of capital market opportunities. First Reserve has a successful record of creating significant capital appreciation by providing the strategic direction and capital support necessary to build companies and increase operating earnings.
- *Incentives to attract and motivate entrepreneurial management teams.* Although First Reserve has considerable industry and financial expertise, it does not manage portfolio companies on a day-to-day basis. Consequently, proven management teams capable of working with First Reserve to design and execute growth plans are critical to the Firm's investment success. Besides having the requisite skills to manage complex companies, First Reserve's management teams should make meaningful financial investments in its companies, generally on the same terms and conditions as First Reserve investors, to insure a commonality of interest. In addition to typically having their own money at risk, First Reserve management teams generally are further incentivized with other equity-based compensation that is primarily based on First Reserve achieving its target returns.

Investment Criteria

In addition to having established its portfolio themes, First Reserve has established five investment criteria which are of fundamental importance in selecting superior investment opportunities in the energy industry.

- *Reasonable acquisition multiples.* It is difficult to earn a superior return if one overpays for an acquisition. As a result, First Reserve uses reasonable acquisition multiples when valuing initial and add-on acquisitions and does not generally project increased valuation multiples in estimating terminal values. First Reserve also utilizes a conservative long

term price deck on commodities in its valuation practices combined with aggressive hedging on existing production. For example, at year end 2005, First Reserve was modeling acquisitions of oil and natural gas based on the equivalent of a \$40 per barrel price when oil was trading at \$61 per barrel.

- *Existing companies with significant growth potential.* First Reserve primarily acquires companies with established operating histories and identifiable growth prospects. The Firm generally does not finance start-ups (other than in the reserve area). First Reserve is particularly interested in companies that have a strong market position, have well-known franchises or brand names and offer significant growth potential through acquisitions, improved or expanded marketing and distribution, the development of new products or services or improved operating and control systems. First Reserve is also interested in manufacturing and service businesses where the energy component of the business is unappreciated by the general investment community, underdeveloped and/or poised for growth. Chart Industries and Dresser-Rand are examples of portfolio companies where First Reserve believes these characteristics applied.
- *Superior return prospects with conservative capital structures.* First Reserve does not necessarily rely on high levels of debt typical in buyout style investments to earn its targeted returns. Investments in core vehicles utilizing growth strategies are often initially structured with significant equity to provide adequate capital to finance add-on acquisitions, expand distribution systems or develop new products and services. As a company grows, First Reserve often provides additional equity or uses its extensive relationships with financial institutions to provide the company with tranches of senior and subordinated debt at attractive rates and at levels which do not impair the company's ability to continue expanding.
- *Proven management teams.* Proven management teams capable of working with First Reserve to design and execute growth plans are critical to the Firm's investment efforts. First Reserve's success in identifying and rewarding strong managers over the years has created a cadre of executives who have worked with First Reserve on multiple investment opportunities and have added an important component to First Reserve's deal flow. Approximately one-fifth of the current portfolio companies have executive officers who have previously been employed by First Reserve or its portfolio companies.
- *Viable exit alternatives.* The ability to generate superior returns on private energy investments ultimately depends on successfully exiting investments once they have achieved their goals. As a result, an important part of First Reserve's evaluation of any prospective investment is identifying viable exit options prior to making the acquisition. Such analysis is critical in maximizing its ability to liquidate an investment in a timely, value-added manner. First Reserve also has successfully executed a number of IPO's. In 2005, First Reserve was the leading financial sponsor globally in terms of the number of and proceeds from IPO's, but it is not only dependent on the unpredictable IPO markets. In the Equity Funds, sales to or mergers with public companies have been the primary method for First Reserve exiting its holdings. Whichever approach is better at the time of exit, it is necessary to focus its investment activity on building companies that eventually will have sufficient critical mass either to go public at a desirable valuation or to be of sufficient interest by virtue of product, scale or market share to be acquired by another industry participant.

Investment Review and Monitoring Process

While investment processes may vary from transaction to transaction and any stage may be compressed in certain special situations, all investments go through the same eight step process.

- *Deal Sheets.* When an investment team member reviews a potential transaction, he or she will enter the transaction in First Reserve's proprietary Deal Sheet database. In the database, he or she will fill out a Deal Sheet which describes the source of the deal, the basics of the transaction (size, deal thesis, etc.) and the recommended disposition of the deal. The vast majority of deals are rejected at this stage. The Deal Sheets are circulated to each member of the investment team as they are entered or updated. This allows the Firm to minimize duplicate review of deals and to begin the coordination of resources for any deal the Firm is pursuing or referring to a portfolio company. Deal Sheets also provide the investment team with the statistics and support for tracking deal flow activity.
- *Preliminary Investment Memorandum.* For deals that are not rejected at the Deal Sheet stage, the applicable deal team prepares a Preliminary Investment Memorandum. The Preliminary Investment Memorandum describes the background of the deal and First Reserve's investment concept and includes a financial model, but in less detail than the presentation in the Board Book described below. The Preliminary Investment Memorandum forms the basis for discussion of the deal at the Monday meeting of the investment staff, and permits the investment staff to reach a consensus as to whether to move forward with a potential deal before the Firm expends significant resources on that deal.
- *Monday Meeting Deal Log.* Active Deal Sheets are recorded and tracked in the Deal Log, which the team discusses at the weekly Monday meeting of the investment staff. Together the Deal Log and the Monday meeting keep the Firm informed about current activities in the portfolio, the status of all First Reserve deals and administrative activities, as well as the Firm's current position and thinking on each portfolio holding and other relevant items. Generally speaking, outside resources (consultants, advisors, legal or accounting) are not used to review deals unless they have been reviewed by the investment team at a meeting. Each pending deal is categorized by sector and priority each week. Each deal on the Deal Log is discussed weekly until the potential investment is either dropped or completed. Most transactions are reviewed more than ten times before consummation. As a general matter, the decisions of the investment team are driven by consensus, but senior members' views obviously carry more weight in developing a consensus. As an investment looks more likely, First Reserve generally assigns two senior (Managing Director, Director or Vice President) deal team members and one or more junior (Associate or Analyst) deal team member to each investment.
- *Board Book.* Board Books are generally compiled by the deal team assigned to the transaction, prior to the closing of each transaction. They enable the investment team members to organize their thoughts and present them in a coherent fashion. Board Books articulate First Reserve's strategy, investment concept, expectations and concerns. They are a record for each deal. Often the Board Books are discussed in separate meetings of the investment team in the later stages of First Reserve's commitment to a transaction.
- *Company Model.* The preparation of the Company Model, a financial projection of company performance and analysis of past performance, is coincidental with the Board Book and is included in that book. Company Models are updated quarterly. They are an

important factor in the Firm's investment decision and form the basis of the Portfolio Review. They are critical to First Reserve's continuing buy/hold/sell decision process on investments. The projections are integrated into First Reserve's Company Summaries.

- *Company Summaries.* The first Company Summary is coincidental with the Board Book and is attached in an appendix to each Board Book. Company Summaries are uniform and are updated quarterly. They provide the second level of detail about an investment beyond the brief summary in the Weekly Deal Log. They are the basis for First Reserve's quarterly investor reports, annual meetings and Portfolio Review.
- *Bank Book.* Most transactions involve third-party financing. First Reserve prepares Bank Books, similar in many respects to the Board Book, for banks and other financial backers of First Reserve's deals. Financings with astute financial partners serve as a second valuable check on First Reserve's own work and force the investment team members to organize their thoughts and test First Reserve's convictions on making an investment.
- *Portfolio Review.* Twice a year, First Reserve performs a bottom-up review of its portfolio, comparing performance against plan and honing the Firm's exit plans and expected returns for each investment. The Portfolio Review brings all of these materials together by Fund. It displays First Reserve's target sale prices, the rates of return and multiples of investment, as well as the impact of extending holding periods. The Portfolio Review enables the investment team to monitor performance and gauge market timing for an exit. One of First Reserve's strengths as an organization has been its sale discipline. Current Company Models and the Portfolio Review process provide the basis upon which to anticipate and to make timely divestitures.

Management Team

First Reserve will serve as investment advisor to Fund XI. The First Reserve team has expanded over the years to include nine Managing Director level professionals, four Directors, one Vice President, seven Assistant Vice Presidents, eight Associates/Analysts, a Chief Financial Officer and a General Counsel.

William E. Macaulay (60), Chairman and Chief Executive Officer, has been with the firm since its founding in 1983. He is responsible for supervision of all aspects of the firm's investment program and strategy, as well as overall management of the firm. Mr. Macaulay serves (or has served) as a director on the boards of ten of the 50 largest oilfield service companies in the world, with public market capitalizations in excess of \$1 billion. Prior to acquiring First Reserve with Mr. Hill in 1983, Mr. Macaulay was a co-founder of Meridien Capital Company, a private equity buyout firm. From 1972 to 1982, Mr. Macaulay was with Oppenheimer & Co., Inc., where he served as Director of Corporate Finance with responsibility for investing Oppenheimer's capital in private equity transactions. At Oppenheimer, he also served as a General Partner and member of the Management Committee of Oppenheimer & Co., as well as President of Oppenheimer Energy Corporation. He was the founder and largest stockholder of Peppermill Oil Company. Mr. Macaulay holds a B.B.A. degree, Magna Cum Laude in Economics from City College of New York and an M.B.A. from the Wharton School of the University of Pennsylvania, where he has also served as a member of the Executive Board.

Ben A. Guill (55), President, joined First Reserve in 1998. He is responsible for deal origination, investment structuring and monitoring. Mr. Guill is head of the Houston office and is responsible for its management. He also is currently (or has been) a director of five of the 50 largest oilfield service companies in the world with public market capitalizations in excess of \$1 billion. Prior to joining First Reserve, Mr. Guill spent eighteen years with Simmons & Company International, an investment banking firm specializing in the energy services market, where he served as

Managing Director and Co-Head of Investment Banking. While at Simmons, Mr. Guill worked with several companies that were held in the First Reserve portfolio. Prior to that time he was with Blyth Eastman Dillon & Company. Mr. Guill received his B.A. degree from Princeton University and an M.B.A. from the Wharton School of the University of Pennsylvania.

John A. Hill (65), Vice Chairman, has been with First Reserve since 1983. Although largely retired, he functions as a senior advisor on deal origination and investor relations. Prior to founding First Reserve with Mr. Macaulay in 1983, Mr. Hill was a co-founder of Meridien Capital Company. From 1976 to 1981, he served as President and Chief Executive Officer of F. Eberstadt & Co., Inc., an investment banking, research and institutional brokerage firm. Subsequently, Mr. Hill was the President and Chief Executive Officer of Marsh & McLennan Asset Management. Prior to 1976, Mr. Hill spent seven years in the U.S. Federal Government as Deputy Administrator of the Federal Energy Administration and Deputy Associate Director of the Office of Management and Budget during the Ford administration. Mr. Hill is currently the Chairman of the Board of Trustees of Putnam Mutual Funds and a member of the Board of Trustees of Sarah Lawrence College. Mr. Hill holds a B.A. degree in Economics from Southern Methodist University and pursued graduate studies there as a Woodrow Wilson Fellow.

Cathleen M. Ellsworth (43), Managing Director, joined First Reserve in 1990. Ms. Ellsworth is responsible for the firm's marketing and investor relations activities. Prior to joining First Reserve, she was an Associate with MacKay-Shields Financial Corporation and, prior to that time, spent eight years with Chemical Bank as an Assistant Vice President in the marketing area of the Chemical Investment Group. Ms. Ellsworth received an A.A. degree from Bradford College, a B.S. degree in Management from the State University of New York at Binghamton and an M.B.A. from Fordham University.

J.W.G. (Will) Honeybourne (55), Managing Director, joined First Reserve in 1999. He is responsible for deal origination and investment structuring and monitoring, focusing on energy manufacturing and services as well as international markets. Prior to joining First Reserve, Mr. Honeybourne served as Senior Vice President of Western Atlas International. Prior to that time, he served as President and Chief Executive Officer of Alberta-based Computalog. His earlier career was primarily with Baker Hughes, including positions as Vice President and General Manager at INTEQ and President of EXLOG. In addition to serving on the boards of various portfolio companies in the U.S., U.K. and Canada, Mr. Honeybourne served as a director of Hong Kong listed CNOOC Ltd. Mr. Honeybourne holds a BSc degree in Oil Technology from Imperial College, London University and is a member of the Society of Petroleum Engineers, the Society of Exploration Geophysicists, and Canadian Institute of Mining, Metallurgy and Petroleum. He also serves as a Director for the Petroleum Equipment Suppliers Association.

Alex T. Krueger (33), Managing Director, joined First Reserve in 1999. As a senior member of the investment team, Mr. Krueger's responsibilities range from deal origination and structuring to due diligence, execution and monitoring. He is involved in investment activities in all areas of the worldwide energy industry, with particular expertise in the coal sector. Mr. Krueger is currently a director of Foundation Coal, one of the largest coal companies in the world. Prior to joining First Reserve, Mr. Krueger worked in the Energy group of Donaldson, Lufkin & Jenrette in Houston. Mr. Krueger holds two B.S. degrees from the University of Pennsylvania, one in Chemical Engineering and one in Finance and Statistics from the Wharton School.

Mark A. McComiskey (35), Managing Director, joined First Reserve in June 2004. Mr. McComiskey's responsibilities include deal origination, structuring, execution, monitoring and exit, with particular emphasis on the energy infrastructure sector. Prior to joining First Reserve, Mr. McComiskey was a Principal at Clayton, Dubilier and Rice. While at Clayton, Dubilier and Rice, he had substantial experience in manufacturing and service industries. Previously,

Mr. McComiskey worked at Debevoise & Plimpton as an Associate, structuring, negotiating and documenting mergers and acquisitions. Mr. McComiskey holds an A.B. degree Magna Cum Laude in Economics from Harvard College and a J.D. Magna Cum Laude from Harvard Law School.

Kenneth W. Moore (34), Managing Director, joined First Reserve in January 2004. Mr. Moore directs First Reserve's capital markets activities both in existing portfolio companies and with regard to new acquisitions. Before joining First Reserve, Mr. Moore was a Vice President in the Leveraged Finance Capital Markets group of Morgan Stanley from 2000-2004. Prior to joining Morgan Stanley, he was an Associate at Chase Securities from 1998-2000, working in the Global Syndicated Finance Group focusing primarily on financial sponsor transactions. Mr. Moore holds a B.A. degree from Tufts University and an M.B.A. from the Johnson School of Management at Cornell University.

Thomas J. Sikorski (46), Managing Director, joined First Reserve in 2002. Mr. Sikorski's responsibilities range from deal origination and structuring to due diligence, execution and monitoring, as well as management of the London office. Mr. Sikorski is involved in investment activities through the entire energy industry, with particular expertise in the worldwide infrastructure sector. Prior to joining First Reserve, he was a Partner with Windward Capital, a private equity firm with \$700 million under management in two funds. Windward was initially the Merchant Banking arm of CSFB/ MetLife. Prior to being a co-founder of Windward in 1994, Mr. Sikorski was a Director at MetLife Private Equity Investments and a Vice President in the CSFB Private Equity Group. Mr. Sikorski holds an A.B. degree Magna Cum Laude in Economics from Harvard College and an M.B.A. from Stanford Business School.

CONCLUSION/RECOMMENDATION

Based upon the successful track record and experience of the principals and the recommendation of PSERS' consultant, Portfolio Advisors, staff recommends that the Board invest an amount equal to 25 percent of the committed capital, but not to exceed \$200 million plus reasonable normal investment expenses, in First Reserve Fund XI, L.P. The final terms and conditions of the investment must be satisfactory to the Investment Office, the Office of Chief Counsel, and the Executive Director.