

ALASKA PERMANENT FUND CORPORATION
Special Meeting of the Board of Trustees
April 13, 2006

Location of Meeting
Sheraton Anchorage Hotel
Josephine's Gallery
401 East 6th Avenue
Anchorage, Alaska

SUMMARY MINUTES

Trustees Present: Carl Brady, Chair
Steve Frank, Vice Chair
William Hudson
Eric Wohlforth

Trustees Absent: William Corbus
David Marquez

Staff Present: Michael Burns, Executive Director
Robert Bartholomew
Richard Shafer
Joyce Andrews
Laura Achee (via teleconference)
Kathy Thatcher (via teleconference)
Chris Phillips (via teleconference)

Invited Participants Present: Robert Linden, PACE Global Energy
Bo Poats, PACE Global Energy
Thom Hirsch, PACE Global Energy
Marty Margolis, PFM Asset Management
John Spagnola, PFM Asset Management
John Bonow, PFM Asset Management
Tom Conroy, PFM Asset Management (via teleconference)
Mike Donnelly, Global Energy Decisions
Gary Hunt, Global Energy Decisions

Others Present: Alex Slivka, McKinley Capital Management (via teleconference)
Unknown (via teleconference)
Paula Dobbyn, ADN

CALL TO ORDER

CHAIR BRADY called the meeting to order at 8:00 a.m.

ROLL CALL

Trustees Brady, Frank, and Hudson were present at roll call. Trustee Wohlforth arrived at 8:20 a.m. to form a quorum. In answer to Chair Brady's question, MR. BURNS reminded the Trustees present that Trustee Corbus and Trustee Marquez would not attend this meeting to avoid the appearance of a conflict of interest.

APPROVAL OF AGENDA

CHAIR BRADY announced that he could meet until 12:00 p.m. and reconvene at 2:00 p.m. to allow more time in the morning than printed on the agenda.

TRUSTEE HUDSON moved to approve the agenda as amended to recess at noon and reconvene at 2:00 p.m. TRUSTEE FRANK seconded.

There being no objection, the motion passed unanimously.

CHAIR BRADY called a brief recess to await the arrival of Trustee Wohlforth at 8:20 a.m.

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

There were no scheduled appearances and there was no public participation.

GAS LINE INVESTMENT PROCESS OVERVIEW

MR. BURNS stated that the Alaska Permanent Fund Corporation (APFC) was looking for a firm to basically cover three aspects, a general capital infrastructure asset class education and how a gas pipeline would fit into that, analysis of an investment, and how such an investment, if appropriate, might fit into the APFC portfolio. MR. BURNS added that all the firms staff looked at were strong on the first two aspects and weaker on the third aspect. The RFP was designed to be modular so more than one firm could be chosen. At this time the education of the energy and infrastructure aspects and analysis of a deal is the most important since Callan can help staff determine how that fits into the portfolio. He noted that Bob Bartholomew had visited all of the firms.

MR. BARTHOLOMEW gave a brief overview of the process to date that led Trustees to the two finalists presenting today. He referred to the write up in the packet of materials given to Trustees and on file at the APFC office in Juneau. He noted that materials marked private and confidential that were provided were in fact public materials. Anything truly proprietary in nature would be discussed in Executive Session if necessary. He also noted the second presentation was a joint venture.

TRUSTEE FRANK inquired what the potential confidentiality issues might be.

MR. BARTHOLOMEW responded that they could be trademarks or proprietary processes or the even ownership structure. He added that he encouraged the firms to publicly disclose as much as possible.

TRUSTEE WOHLFORTH asked for a review of the teleconference that dropped all but the two firms presenting today. MR. BARTHOLOMEW quickly reviewed the scoring process and RFP responses. He explained in detail the reason for scoring PACE even though they had a limited liability clause that would be unacceptable presuming that would be a negotiable point. TRUSTEE WOHLFORTH asked if staff had passed the limited liability issue by counsel. MR. BARTHOLOMEW responded yes and stated the firm was notified that would not be acceptable to us.

CHAIR BRADY stated the purpose of the meeting was somewhat unclear in terms of anticipating what we may be asked and asked for Trustee questions.

TRUSTEE WOHLFORTH asked if this presentation was to be educational as well as a presentation for selection. MR. BARTHOLOMEW stated that the presenters were asked to explain their resources and experience for educating Trustees, rather than to educate in this presentation. They have been informed about what little we do know about the possibility of a gas pipeline investment. They will talk about infrastructure in general and their experience in evaluating projects that might be similar to what we could be doing.

TRUSTEE FRANK stated they could have chosen a contractor at the teleconferenced meeting, but he felt a face-to-face, lengthy and thorough meeting would be helpful in order to make the best decision.

MR. BURNS added that both firms were asked if they would be prepared to make an educational presentation to the full Board at the May meeting. Both firms replied yes.

CHAIR BRADY noted that we are at a monumental time in the history of the Fund and he just wanted to make sure everyone was aware of what we were talking about. MR. BURNS added that today's meeting would be about who would have the best capabilities to help us with the decision to go into this type of investment should we be asked to do so.

PACE GLOBAL ENERGY

For more information on this presentation, please refer to the document entitled "PACE Global Energy Services, Gas Pipeline Investment Advisor Alaska Permanent Fund Corporation" dated April 13, 2006 and kept on file at the APFC offices.

CHAIR BRADY welcomed the representatives of PACE and let them know this

was a new process for the Board and he preferred a format that allowed for questions and answers during the presentation.

MR. BO POATS welcomed the question and answer format and stated he was excited to share their knowledge and expertise. He then introduced himself as Managing Director for Financial and Strategic Services and as the person who would serve as director of this project. Thom Hirsch was introduced as head of regulatory practice and general counsel. Robert Linden was introduced as Director of Strategic Fuels Practice. Mr. Linden has 25 years in the business. He also mentioned the support of his firm's CEO, Tim Sullivan, for the project.

MR. POATS gave an overview of the points they wanted to cover in the presentation, their value propositions and assumptions. Corporate qualifications and an overview of the company as well as specific cases that are similar would be covered. Additionally, their unique asset allocation qualifications and educational processes would be laid out as well as potential challenges.

MR. POATS referred to presentation materials, which are on file at the APFC office in Juneau.

MR. POATS continued by explaining that this type of infrastructure investment would be best classified as private equity in his opinion, although it is unique as private equity. It requires education as well as evaluation and guidance, risk assessments and divergence of interests and how they would approach that as well as other issues.

MR. POATS stated that a lot of focus needed to be on pre-investment structuring, as well as post-investment operational issues. He stated PACE was a "soup to nuts" company that takes projects from the development phase all the way through.

MR. POATS stated structuring needs to be flexible and the issues and educational process needs to be laid bare very quickly.

TRUSTEE WOHLFORTH checked with Mr. Poats to make sure he understood this was a public meeting and that even though his materials stated "Proprietary and Confidential" they were not.

MR. POATS continued by saying they would discuss the regulatory process and the importance of understanding that process as well as potential rates of return within that framework. He went on to say that development risk was a major area to be aware of and he discussed a potential take out on the investment as an element of the educational component.

He stated that our positions and rights as an investor would be laid out initially

along with the operational risks and fiduciary oversight this type of investment requires. That would be the focus of the education as well. The desire is to provide a dividend stream post-investment and to maintain that dividend stream was stated as the primary goal for the Fund.

MR. POATS briefly reviewed his company's background and history with similar projects. MR. POATS stated the individuals at the firm have many years of experience and believe that PACE offers unparalleled services. The firm has unique financial and industry analysis capacity to enhance the Fund's portfolio. They have been hired as an expert in negotiating all stages of development. PACE is currently working on behalf of the Russian government in this capacity. They support the full range of a deal from structuring to serving as a fiduciary and asset manager. The firm often gives briefings at the executive or board levels on complex issues in a qualitative and numerical context in order to understand the "bottom line."

MR. POATS listed what PACE considers to be priority actions. These include evaluating proposed contract terms between Alaska Gas Pipeline sponsors and the Alaska Department of Revenue (DOR). That would move quickly to negotiations, perhaps preliminary, but the contractor would represent the Fund's business model and governance terms. The development plan would need to be evaluated carefully. There would need to be an analysis of structure respective to the role and interests of the Fund and DOR and the potential convergence of interests and sharing of resources. Any options must be evaluated on the Fund's behalf. The firm would engage in a portfolio impact analysis represented by each option. Finally, PACE would perform regulatory analysis.

TRUSTEE WOHLFORTH noted his understanding that the contract terms being discussed are the terms that have been negotiated, but are not yet available. MR. POATS implied his understanding. TRUSTEE WOHLFORTH asked what a pipeline development plan was. MR. POATS replied that it is the path, timing, financing, and regulatory framework of a pipeline investment. TRUSTEE WOHLFORTH asked if that would be done after permitting is in place, but before construction. MR. POATS assumed the sponsors would be prepared to provide the plan quickly after the submission of the proposed contract. He stated it is prudent to insist on it. Without that plan the ability to assess the pitfalls or benefits of the investment would be lacking. The investment plan must be laid fairly bare, but not in complete detail. TRUSTEE WOHLFORTH asked if PACE would provide a detailed chart of juncture points, including when that plan should be expected to be available.

TRUSTEE HUDSON asked if PACE has experience working with another entity like the Fund. MR. POATS stated that they work closely with the Wyoming State government in association with the Wyoming Producers Association. PACE has also represented a number of public interests, but not on the same scale as in

Alaska.

TRUSTEE FRANK noted that the Fund has not been asked to make an investment; the Fund is simply trying to be educated. However, PACE makes a good point in terms of looking at the development plan. It has been his impression that the sponsors will spend time over the next few years to develop a plan to help them decide whether they will move forward. The Fund's role in that is ill defined. If the sponsors believe the State is integral and the State believes the Fund is integral to the process, there might be a seat at the table. The ability to have input would be logical because there may be more and less desirable ways to formulate the deal. The Fund has not progressed to the point of defining its role, so it might be difficult for PACE to begin advising the Fund at this point. MR. HIRSCH thought this depends on when the Fund would be asked to make an investment. Prior to that, the Fund would want to see their entire plan. Before the Fund invests, it should be comfortable with their go-forward plan. TRUSTEE FRANK questioned how PACE could advise the Fund until the deal is clear. It would be possible to analyze a particular scenario or option, although the proposal is not yet clear. He thought it would be several years in the future before something definitive is known in terms of the development plan.

CHAIR BRADY stated there is no question but that the Fund is doing diligence to be prepared. The Fund wants to analyze what would be the situation if the Fund were an owner/participant. He stated it is more likely than not that the Fund will be asked to fund a portion or all of the State's ownership in the gas line. He was comfortable with the position the Fund is in at this time, which allows it to analyze scenarios in the event the Fund is asked to invest. He noted the Fund often wants to be prepared to consider a potential investment.

TRUSTEE WOHLFORTH felt there was a timing issue in terms of what PACE is being asked to do for the Fund. For example, evaluating the contract terms between the sponsors and the DOR could take a number of forms. When the contract is exposed, PACE could say it is deficient in several areas in terms of investment interest. He was not sure whether that would be prudent. MR. POATS stated that PACE would do work only under the Fund's guidance. Because of the public nature of this situation, the critique should not begin too early in the process. He felt the fundamental question is whether this project would benefit from State participation. The firm would evaluate the issues and indicate whether or not it would benefit from the State's participation. The next step is the appropriate level of involvement. From that, the Fund should decide whether it wants to be considered even as a potential participant/investor. He felt it would be prudent to stay in the conversation so long as it is possible that the question is answered that State participation is desirable. MR. LINDEN noted it is important to know if this is not something the Fund wants to pursue.

CHAIR BRADY felt these remarks were well made. He stated the Fund should be

prepared to analyze what would be the benefits or detriments of participation and be well enough educated to answer questions. MR. POATS stated that Mr. Bartholomew raised the question of “why this project in this fund’s portfolio?” Stepping back and looking at the flow of funds to the Fund and the importance of this project to its constituency, he felt that even if the Fund only shepherded the project and then did not participate, it is at least fulfilling its role in terms of prudence and the interest of the citizenry having a well informed body giving this rightful scrutiny from the start.

MR. BURNS stated his sense is that the Fund is looking at evaluation, not negotiation. The Fund would be a participant with other State entities. He did not think the Fund would be in the position to say it would not participate in a deal unless it is done a certain way. The State will determine how good it is for the state. The only thing on the Fund’s table is whether this is a good investment for the Fund. MR. POATS felt this is an important point to put on the table, but the issue is what level of detail will be available at what point. He thought the nature of the investment structures might not be crystalline, so there is a question whether the structure will be subject to modification. He concurred that evaluation, not negotiation, is the function of the firm at this time.

TRUSTEE FRANK thought that it is interesting and important to evaluate whether the State benefits from involvement. If the analysis indicates that State involvement is beneficial, that would be important information. He noted that a banker often gives feedback to how an investment can be structured. His concern is how able the firm will be to review and comment on a proposal at this point in time. It could be some time into the future until a plan is formulated to which the firm can respond. MR. HIRSCH added that at this early stage PACE could assist the Fund in knowing what to look for, even if things are coming in the future. If there is no development plan, the firm can indicate what should be in a plan.

MR. BURNS thought the Fund has little impact at the project level. There is great control over the Fund’s investment in the project.

MR. POATS reviewed the firm’s qualifications. The firm is headquartered in Washington D.C. and has opened offices in New York and San Diego. The Columbia, Ohio office was acquired recently and enhances their operation. Houston and Mexico City are highly active areas. There are also offices in London and Moscow.

The firm supports projects from development through financing, and management. PACE does strategic studies and has tremendous market savvy. The corporate ethic is toward supporting and promoting value creation development through financing. The firm has a depth of knowledge across the regulatory framework and has ongoing fiduciary management, serving as agent managers of a \$10 billion energy portfolio. The firm works for state and federal agencies,

energy companies, industrials and commercials, financial institutions, and utilities. The firm is unique in that it offers integrated solutions. The firm understands power, which is important in terms of structuring, risk of infrastructure projects, fuel, which is the firm's history, and day-to-day risk management. MR. POATS stated they are in this market every day.

TRUSTEE FRANK asked if the firm is taking market risk. MR. POATS replied that the firm is not taking market risk; it is managing it on behalf of clients. The firm has an agency agreement that sets out parameters in terms of the positions that can be taken on behalf of clients. MR. HIRSCH stated the firm acts as an agent and does not take title to any commodity. This makes the services very transparent because the fee is not embedded in the commodity. TRUSTEE FRANK asked if the firm is an energy trader or an advisor. MR. HIRSCH replied that the firm is an advisor. TRUSTEE FRANK asked if the firm would be involved in exit strategies. MR. HIRSCH replied in the affirmative and explained that the firm has a risk management group. TRUSTEE FRANK asked how the firm is not like Enron. MR. HIRSCH stated Enron was a competitor in one sense. He gave the example of a university that was approached by Enron. Enron's fee was tied to the price of the commodity, which is not the case for PACE.

TRUSTEE WOHLFORTH asked how much of the firm's gross income is attributable to energy advising. MR. HIRSCH replied that it is significant. TRUSTEE WOHLFORTH asked how many competitors do much the same thing. MR. HIRSCH stated a handful of firms are independent like PACE and others do it as part of selling the commodity. MR. LINDEN stated there are also boutique shops.

TRUSTEE FRANK thought this demonstrates the firm brings market knowledge to the table. CHAIR BRADY understood the firm is an agent on behalf of a customer and its fees are not tied to the swings in the product. This removes the firm from the profits. MR. HIRSCH added that PACE is set apart by the fact that it is already a consulting firm and is also a transactional firm. Not only can the firm advise clients, but also it has been in the trenches investing for its clients.

MR. POATS stated the firm has a solid engineering group that would play a key role in the Alaska gas pipeline analysis. The firm is leading the pre-feed engineering development process associated with the \$40 billion LNG Shtokman project, which serves Western Europe and North America. TRUSTEE FRANK asked if the firm has an engineering department that designs pipelines. MR. POATS clarified that they have an advisory engineering group that will make proposals on the best technology, design and approach. The role is to review company proposals, ensure that the technology is appropriate, and ensure routes and sites are appropriate. They then will oversee the process on behalf of a sponsor client and represent their interests technically at the table. These

decisions impact the risk of a project early on in the development process. TRUSTEE FRANK asked the size of the engineering group. MR. POATS replied that there are 20 to 25 pipe, power, and end-use engineers. They review the selection process on behalf of their clients.

MR. POATS stated that PACE has 15 to 20 core financial experts. The firm's core work is in structuring, modeling, valuation, and sensitivity and scenario analysis. The finance group integrates the deal that flows through to case outcomes. They are the integrator and have a tremendous depth of financial expertise.

The firm is also asked occasionally to raise capital. Typically that charge will be on smaller projects of \$250 million or below.

The firm transitions from the strategic to the transactional to the operation. In terms of strategic issues, risk governance is important to understand, particularly for the Fund. Regulatory advising, financial advising, and asset and company restructuring are provided. In terms of transactional issues, the firm investigates acquisition and divestiture, M&A, investment structuring, power and fuel procurement, and contract negotiation. In terms of operational issues, the firm provides risk management, asset development support, energy management, fiduciary oversight, and process and system optimization. They do not do appraisals.

MR. HIRSCH added that because the firm deals with many law firms, it can assist the Fund in selecting an energy law firm and can also help manage a law firm that is selected.

MR. POATS stated the firm's current activity in Alaska is serving as energy management advisors to fifty facilities in Alaska performing a basic portfolio of energy management services from invoice processing to tariff analysis, procurement, and energy savings activity associated largely with an end-user clientele.

MR. POATS stated the firm has been the lead player in large international projects, has extensive North American experience, and has portfolio advisory experience that enhances the Fund's capabilities. He reviewed a map delineating 15 assets in which PACE is providing services.

CHAIR BRADY asked if the firm represents anyone in the Canadian territories that might pose a conflict. MR. POATS replied that this has been examined and none exist. MR. LINDEN stated he recently did an analysis for a producer that was looking for storage facilities. MR. HIRSCH stated that over one year ago a small amount of work was done for advisors to the Alaska Gas Pipeline Port Authority. The firm is also currently performing a study for Conoco Philips on a

project in the US that does not involve the Alaska gas pipeline.

MR. POATS stated the firm's core business is in infrastructure development analysis.

TRUSTEE WOHLFORTH asked if the firm represents any investment banking firms. MR. POATS replied in the affirmative. He stated they have worked with Goldman Sachs, Morgan Stanley and other investment banks. They usually bring in PACE for a third party opinion or independent expert.

MR. POATS reviewed international case study examples, beginning with Shtokman and what their role is as well as where they are in the negotiation process.

TRUSTEE WOHLFORTH asked when the Shtokman deal would be financed. MR. POATS replied that the projected date is mid-2007.

MR. POATS next reviewed the North European Gas Pipeline (NEGPL) pre-feasibility work done by the firm. These included supply/demand projections, configuration and cost analysis, partner identification, end market pricing, competitor and strategic review, financial structuring, tariff and netback analysis, overall financial feasibility, sensitivity cases. PACE served as lead advisor on the \$7 billion pipeline and \$40 billion integrated Shtokman LNG. MR. POATS stated it would be important to watch these projects going forward in terms of their arrival in the market as it relates to the Alaska project. PACE is working on a global study of LNG markets and projects currently.

MR. POATS next reviewed the BOTAS oil and gas pipeline development and advisory work done in Turkey. The firm was brought in as the lead advisor to the government, selected by the US State Department to represent the US and Turkey interest. He reviewed a map of the pipeline and indicated that based on the oil pipeline experience, the firm was asked to advise regarding a gas pipeline. The firm's role was commercial, enabling them to frame the agreements and the investment so that it could be financed. The firm was involved in tariff development for the BOTAS gas network. The tariff structure was zonal entry and postage exit because each of the branches coming in required their own rate structure, whereas the core consumption area in the middle was a "postage stamp." He noted that the firm could drop down from an advisory role to one assisting in the implementation of a project. Maps and details are on file at the Fund offices.

MR. HIRSCH stated he heads the regulatory group at PACE. He is a lawyer and worked at the Federal Energy Regulatory Commission for many years and was involved in the early stages of de-regulation of natural gas markets, including pipeline construction projects. He also represented the trade association for the

pulp and paper industry, which is a high consumer of gas, and guided them through the de-regulation of the pipeline industry. He has been at PACE for 10 years. The regulatory group is comprised of 15 other individuals with varied expertise and legal training. The group represents two offshore pipelines in the Gulf of Mexico, have represented an intrastate pipeline in Montana, and two other pipelines associated with LNG facilities in Louisiana and Texas, a storage company in Louisiana, and when there are no conflicts, they represent users of gas. The firm provides expert testimony in regulatory proceedings on rate issues, cost of service, rate design, return on equity, and market-based rates.

The firm also advises on rates and terms of conditions. The most important to the Fund will likely be the credit of the shippers that are providing the revenue flow to the project and how much credit the shipper will provide, for how long, what amount, and to what extent a shipper can extend its contract to another shipper. The firm also advises on the certificate, that is the original approval by the Federal Energy Regulatory Commission (FERC) that allows the project to commence. There are also issues relating to market power. FERC has already issued rules relating to the Alaska gas pipeline in which it has made some decisions that in its view will create competition among producers for Alaskan gas. For instance, the pipeline sponsors will probably negotiate pre-subscription agreements with its affiliates that will become effective if certain things happen. Those contracts should commit the affiliates to the bulk of the capacity in the pipeline and that should support the equity investment in the pipeline. Those have to be filed with the FERC and made public and then the producers have to offer any excess capacity. The pipeline may have to go back and allocate excess and prorate it by reducing the pre-subscription agreements.

Standards of conduct were issued by the FERC in 2004 that were designed to create separation among the employees within a major energy company and as to the information that these groups can exchange between the companies that manage the pipeline and the company affiliates.

MR. HIRSCH stated PACE staff is intimately involved in all these issues. He stated he would continue to give specific examples of regulatory work that PACE has done.

BREAK 10:12 a.m. to 10:26 a.m.

MR. HIRSCH then gave examples of specific projects PACE has been involved in and the regulatory process. He began with the Discovery Gas Transmission Project, which is an offshore pipeline. PACE was engaged to be the regulatory consultant on the project. He reviewed for Trustees the complications and issues with the FERC. PACE filed a certificate application with the FERC, as they would do for the Alaska gas line and included a request for an initial rate. An

initial rate gets a different scrutiny than a change in a rate, which is important to know. The former is less involved. They also helped the pipeline develop terms and conditions of service, which involve shipper credit worthiness, imbalances, nominations and scheduling. Those can create very large costs, which FERC tries to push those costs to the shippers and customers that create the costs. He then reviewed jurisdiction issues relating to the initial rate that would be important to Alaska. There is also a standard cost of service or a levelized rate. This will impact revenue. A levelized rate involves going to FERC and explaining the pre-subscription contracts are, for instance, 20 years long and the rate is designed to be the same for that entire period. The depreciation rate varies every year so that the cost the pipeline incurs each year is the same. That is different than filing for a rate that looks at cost in year one and establishes a rate. The ideal is that such a rate would decline because of depreciation. Cost of service must be determined in order to determine a rate. This cost includes cost of facilities, rate of return (return on equity and cost of debt), O&M, depreciation, and the level of subscription of the pipeline. The FERC staff will file written questions on the filing that must be answered. Once the FERC feels the application is complete, it is ready to rule.

TRUSTEE WOHLFORTH asked when this process takes place in relation to the financing. MR. HIRSCH stated the question would become whether the lenders will take public risk, given the question of appeal. He thought the lender would at least want the certificate and some of the post-certificate conditions satisfied before breaking ground.

TRUSTEE FRANK understood that the certificate containing the rate would be issued before the project is built. MR. HIRSCH replied in the affirmative. MR. HIRSCH replied that it depends on the level, but if the overrun is not deemed to be imprudent and was unavoidable then the FERC will allow the pipeline to revise its rate before it becomes effective. There could be disagreement about the level of overrun that could be included in the rate. TRUSTEE FRANK inquired who would be involved in the disagreement. MR. HIRSCH replied it would be the shippers.

TRUSTEE WOHLFORTH noted that the TAPS line cost increased several billion over a three-year period of construction. He asked what the FERC would say to such an increase. MR. HIRSCH replied that it is difficult to say the FERC would approve all of an overrun for a gas pipeline. It is clear that the FERC wants to make this pipeline a reality. The revenue stream to the pipeline company is not always determined by the rate approved by the FERC, but rather by the contract between the shipper and the pipeline. FERC allows pipelines to have a negotiated rate that is higher than the rate approved by the FERC. With the Alaska gas pipeline it will be important to carefully analyze the contract between the pipeline and the pre-subscription shippers. TRUSTEE FRANK noted that Conoco Phillips would be both a member of the pipeline consortium and a shipper and the State is discussing the same. MR. HIRSCH believed there would be an LLC or limited

partnership and Conoco and the State would have its own subsidiaries that have ownership in the consortium. He stated there would be separate entities. TRUSTEE FRANK inquired about interveners, a royalty owner that was not a shipper or member of a pipeline consortium, and noted that if the State takes an ownership interest in the pipeline, it is in the position of wearing both hats. MR. HIRSCH stated there would be an entity that will have an interest in the pipeline rate being as low as possible that will show up in the FERC proceedings to argue for a lower rate that will not include cost overruns.

MR. BURNS asked if it could be someone like the Illinois Commerce Commission. MR. HIRSCH said it could be or possibly a Canadian interest. He stated the FERC process is very open and easy to intervene. He added though that the FERC has taken the position that it is in the national interest for the Alaska gas pipeline to be built.

MR. POATS stated that several years ago and until 6 months ago PACE has been involved with the State of Wyoming and the Wyoming Producers Association. The firm put together a comprehensive market assessment regarding the gas market. The firm did a competitive assessment of alternative markets, evaluated alternative routes, looked at market basis implications based on different configurations and value enhancement strategies, reviewed regulatory obstacles to pursuing different development paths, and also credit issues and financing challenges. He noted that an issue in recent times is the decline in credit capacity of the shippers.

TRUSTEE WOHLFORTH inquired as to the size of the financing package for the Wyoming deal. MR. POATS replied it was 1.7 bcf per day. The financing was \$1.5 billion for a 1,400 mile pipeline.

MR. HIRSCH stated one other issue relating to the revenue flow and the credit is to what extent the shipper is obligated to pay a fixed fee vs. a variable fee based on how much gas is put in the pipeline. FERC's policy is that all fixed costs, including returns, can be collected through the reservation fee and only the variable costs are collected through the usage rate. The pre-subscription agreements will determine all of that. TRUSTEE WOHLFORTH asked if FERC makes a judgment as to the financibility of the line. MR. HIRSCH replied FERC's policy is that all the fixed costs go into the reservation fee, but that FERC's rate determination is the default rate and contracts can vary from that.

MR. BURNS understood the contract would be structured as a "ship or pay rather than take or pay." He asked if that is a riskier model. MR. HIRSCH understood that all of the fixed costs are loaded into the reservation fee and the shippers must pay regardless of their usage. That is beneficial from the Fund's perspective.

TRUSTEE FRANK asked if the model, which showed a 14% cost on equity, was

a representative rate or a historic rate or what. MR. HIRSCH stated that it was a rate approved for that situation. It highlights the distinction from the level of review at the initial rate and a rate change. The first determinations on the return on equity are higher in the initial rates. The latest rate change ruling was 9.4%, but it is starting to creep back up. They use a discounted cash flow analysis and it is 2/3 rated by comparable companies and 1/3 rated by long-term interest rates. MR. POATS offered to send Trustees the formula. The analysis comes out with a range.

MR. BURNS asked if the 14% was also influenced by debt/equity ratio. The analysis for a return on equity comes out with a range. MR. HIRSCH gave an explanation of how that was determined. MR. BURNS asked how the Federal Loan Guarantee fits into it all. MR. HIRSCH stated that there would be a lower return on equity because there would be less risk if the Federal Loan Guarantee comes into play.

MR. POATS concluded by saying they used the Wyoming example because it was similar in many ways to the Alaska project, though it was smaller. One issue that will be important for the Trustees to consider what role an expansion or a new pipe plays into the North American market.

TRUSTEE FRANK asked how FERC deals with changes of ownership and premiums paid for assets that are purchased and how does that affect the seller. MR. HIRSCH stated the ownership changes usually occur at the LLC level and FERC has no control over that assignability. TRUSTEE FRANK then inquired if the Fund decides to sell the pipeline if it would be like selling a fixed income security where the price is going to flow with comparable rates of return or work the purchase price into cost. MR. HIRSCH stated FERC would not recognize a premium in rates at the time of a sale. MR. POATS stated it's important to be there at every stage to protect your interests. TRUSTEE FRANK asked if FERC would reduce the rate of return at the time because of prevailing interest rates. MR. HIRSCH responded in the negative. The initial rate only changes if you apply for a rate change or if FERC investigates and opens it up, which is highly unusual. MR. POATS added that the risk of value shift is probably greater early on.

MR. SHAFER asked if it were possible to convert our ownership interest from being paid in cash to being paid in gas. MR. HIRSCH stated that would create a regulatory issue because you would be both a shipper and an owner and would be subject to standards of conduct to manage both parts as well as a valuation issue.

MR. POATS referred to one more example in the Gas Transition Northwest (GTN) system, which runs from Canada to the California border and the south. The issue is related to the lender point of view. PACE was asked to look at the project from the ground up and from the top down regarding the value of the pipe

and the market and what their headroom was. They had to determine the probability that they would bump up against FERC rates and have to file for a rate change. They had to do complicated market valuations and financing projections.

MR. POATS quickly reviewed their asset allocation experience. He reviewed a model, the Theseus Output, they use to tailor a financial scenario to a potential pipeline investment and other sources of funds and offer an independent view from what we currently use. He explained the model's risk analysis and valuation projection tools. He stated they would go on record with their outlooks.

MR. POATS then moved on to their proposal for Trustee education. They would provide both portfolio advisory and energy assessment analysis and how they interact. (See slide 37 of presentation on file.) They would also focus on risks of a project like this and mitigations to that risk and what is important to know for each phase of the project. MR. POATS then proceeded to what PACE sees as key issues for the APFC in making a private infrastructure investment and the guidelines they worked on. The items are listed on slide 41 of the presentation.

MR. LINDEN explained his role in the project and his background and how it would all tie together. He was very involved in TAPS and has a long history in Alaska. He stated the earlier the points of divergence are addressed the better off the Fund would be. He summarized the issues that need to be examined in regards to this project, such as a low price in the market for the product and other quick screens.

Before concluding their presentation MR. POATS reviewed the projected pipeline flow of funds and the projected timeline for all phases of the project. He laid out the typical major steps of a development project across a timeline that is indicative of a project of this scale from agreement through permitting, financing, engineering, procurement and cash flow. Additionally, he addressed liquidity and take out structures. MR. POATS reiterated an expected higher return in the early stage of the investment. He stated PACE was not coming in as strong proponents or opponents of the project, but recommends caution and a hard look at whether or not a pipeline investment makes sense for the Fund. MR. POATS stated the Trustees were looking at a long gestation period between the physical structure and cash flows, which is a significant issue to consider when deciding on the financing for this project.

MR. POATS reviewed the APFC as a pipeline investor only vs. an integrated investor where the producers and State own both reserves and pipeline and the risks and benefits of each. He continued by reviewing pipeline investment structure pros and cons depending on how the project will be financed. He stated it was important early on to flush out the path.

TRUSTEE HUDSON asked if up-front investment costs prior to any recovery

was something that could be analyzed from the Trustee perspective. MR. POATS replied they would propose to create for the APFC's share of the equity capital investment a schedule on an annual basis and how the Fund could protect that as a prudent investor.

TRUSTEE WOHLFORTH asked for clarification from PACE legal counsel on the limited liability statement originally attached to their proposal and verification that the proposal no longer contains the statement. MR. HIRSCH stated that was true; normally they liked to have some limit on their exposure on a project of this size and he hoped for some ability to negotiate an alternative limit. MR. WOHLFORTH asked how much a delay in this project would occur as a result of other global projects going on and how that might affect the outcome. MR. LINDEN stated that who gets there first is an issue and this project would come in after some of the other projects.

MR. BURNS asked if this project was included in PACE's long-term projections for gas in the United States. MR. LINDEN answered in the affirmative. MR. LINDEN added they are placing more focus on global LNG driven balances, absorption capacities of the globe and economic growth. He stated they believe \$4.50 is a credible low lender long-term floor. Gas will become politicized just like oil going forward in his view. Their view is that long-term this supply is necessary for the lower 48 states.

TRUSTEE FRANK inquired about the cost of competing LNG vs. the cost of this type of project. MR. LINDEN responded by saying that cost increases and capacity restraints have stunned the market recently, however, there is a large quantity of LNG in the U.S. right now. TRUSTEE FRANK commented that he was under the impression there was stranded gas all over the world and it was just a matter of getting it to market with a high enough domestic price. MR. LINDEN agreed and said the Alaska gas pipeline project was a case in point and that up to two years ago pricing for getting it to market was the issue.

MR. POATS concluded the PACE presentation by saying they have a good handle on what's going on in the public domain with infrastructures and they would be happy to provide more detail to the Board. He quickly reviewed other staff of PACE that would be working on this project.

CHAIR BRADY thanked PACE for their presentation.

LUNCH BREAK 11:15 a.m. to 2:00 p.m.

PFM ASSET MANAGEMENT, LLC and GLOBAL ENERGY DECISIONS

For more information on this presentation, please refer to the document entitled "Alaska Permanent Fund Corporation" dated April 13, 2006 and kept on file at the APFC offices.

MARTY MARGOLIS, JOHN SPAGNOLA and JON BONOW presented to the Board from PFM and MIKE DONNELLY and GARY HUNT presented to the Board from Global Energy Decisions. TOM CONROY from PFM participated via teleconference.

BOB BARTHOLOMEW made introductions of PFM and Global Energy presenters.

MR. MARGOLIS began by stating their presentation was broken down into four parts, their business background, their analytic approach, key issues from their perspective and trustee education, which they believe is a key element.

MR. MARGOLIS stated Global Energy and PFM were doing this on a joint basis. He stated that Mike Donnelly had 35 years of experience in the energy consulting experience and a strong Alaska experience. Gary Hunt also has 35 years of experience and he is now President of Global Energy. He also brings together public sector and private sector experience. John Spagnola co-manages PFM Investment Management. Tom Conway comes from a hands-on chief investment officer background. MR. MARGOLIS is the Chief Investment Officer for PFM and has been with them a long time. Investment management is his area of expertise. Jon Bonow manages the practice in Seattle and is an expert in infrastructure investing. He briefly explained how the team came together.

Global Energy's involvement would be the lead in developing credit, operating and economic models for this project. PFM would take that input and formulate it and advise Trustees in a manner they are accustomed to from their other consultants so they can fulfill their fiduciary responsibilities. PFM's strength is in traditional asset allocation, asset analysis, risk/reward analysis, benchmarking and so forth. If required they have experience in negotiating the "guts of a transaction", which is Jon Bonow's area of expertise. MR. MARGOLIS reviewed the structure of PFM's four businesses. He stated that Jon Bonow is part of Public Financial Management, which does transaction management and capital planning for a public agency. He stated PFM is employee owned by 54 owner employees. MR. MARGOLIS stated PFM is the nation's premier independent financial and investment advisor. They have a heightened awareness of the capital markets. They have vast experience with transactions and manage a fair amount of fixed income assets. They have a long experience with this type of infrastructure financing. Their entire business approach emphasizes their fiduciary responsibilities to their clients. He emphasized their company has a culture of high ethical standards and strict compliance. There are no conflicts of interest.

MR. BONOW explained how his transaction business gave them an understanding of the capital marketplace. Within public power they worked on 27 major transactions last year, which outpaces everyone else. This piece of the transaction, accessing the capital markets, is an essential part of the project. He referred Trustees to page ten of the presentation for a summary of their infrastructure project finance business. There are ways to make this a less risky process because they understand both the buy side and the sell side of the business.

MR. SPAGNOLA stated their role is to take the same kind of work they do with public pension funds and apply it to the corporation. Their fundamental role is to educate trustees. Typically, they educate trustees on traditional asset classes, alternatives, investment trends and what other planned sponsors are doing. They see their role as to protect the Trustees of the Fund. They plan to present information in a clear and concise manner in non-traditional asset classes.

MR. CONWAY stated they've invested directly in a number of investment strategies and his experience with that prior to joining PFM is extensive as well in non-traditional asset classes. He reviewed his experience in detail (page 12 of the presentation).

MR. HUNT explained his role with Global Energy Advisors. They serve as advisors to investors or investment advisors wanting to invest in energy infrastructure investments. They try to answer the question, "will I get my money back, if I invest in this." They also answer the question of what exposures the firm has to the choices that are available. They are experts at looking at markets, the value of energy investments, assessing portfolio risks and looking at strategic fuels on a worldwide basis. He stated they are part of Global Energy Decisions, which has the industry's premier and first fully integrated software, data, advisory services and strategic consulting solutions. They put together complete solutions for clients. They have offices throughout North America, Europe and Australia for Asia markets. Clients are asking them for an independent view of the markets and the cash flow at risk. Their business comes from developing standardized best practices for doing that kind of analysis and consistently applying it across the industry. They take the insight about markets, fuels and risk and have built a retainer based advisory service. They now have over 100 clients for that. He stated that Global Energy software solutions and best practices have become the standard of the industry in each segment of the market they serve. Their software is used widely by most of the major energy companies in the world. MR. HUNT'S advisory services are used by Fitch Ratings for credit analysis. They don't work for developers typically, but for investors.

MR. HUNT stated his core competencies are limited; he doesn't do all things for all people. They narrowly focus on markets, risk, asset valuation, fuels and the

strategies for how to apply those to business transactions. From a price forecasting standpoint they have a standardized approach to market fundamental analysis. Every six months they build up a fundamental view of supply and demand and its implications, which is published. They are the only firm that publishes a report card of their views. MR. HUNT stated the APFC focus is how the Fund will perform. In the case where revenue isn't realized for a number of years and Global Energy would help the Fund learn how to "ride the wave."

MR. MAGNOLIS gave examples of analytic approaches. They reviewed competencies of both companies and will show how they are complimentary and coordinated. Global Energy was one of the pioneers in using stochastic analysis for factoring in uncertainty into the calculus for the real option value for a given asset and the range of risk exposures. Their approach to portfolio risk analysis relies heavily on looking for the efficient frontier and being able to evaluate the risk exposures and options around that efficient frontier and how to mitigate that risk. It is a very quantitative approach to risk analysis. He then went on to explain the chart on the history of the energy industry. Understanding the market for power generation and its implications back into fuels is critical. (See slide 23 or the presentation.) He stated the chart shows that we have effectively built the next generation of power plants, but only half of them are running, because too many were built for supply and need. Also, the price of fuel needs to be high enough to be economic to run them. A key challenge looking forward is when those power plants come on and if there will be more economic alternatives. The same fundamental analysis on the fuel side as the power side was reviewed next.

MR. BURNS asked how many plants he was referring to. MR. HUNT stated we're using maybe 35-40% of what is available. Some of them might be disassembled and sold to China. GE gas turbines are about to be sold on EBay. Their use is dependent on fuel prices, the recovery of wholesale power generation markets, and the relative economics of coal, nuclear energy and gas. All of that is driven by the relationship to oil prices. TRUSTEE FRANK asked how many of their customers were among all the ones doing the super building. MR. HUNT replied that they warned of markets overbuilding in 2000-2001 and actually got fired from two investment firms for saying that. He said they have one view of the power markets in each region and one view only and they stick to that view until something changes.

TRUSTEE HUDSON asked what kind of thinking went into the overbuilding. MR. HUNT said it varied by region. In the west it was the demand by the California market. In Washington, it had to do with environmental issues affecting hydropower. In the Southeast markets it was because regulation was really easy there and it was close to the gas in the Gulf. Other issues existed in other regions, which MR. HUNT reviewed.

TRUSTEE FRANK asked what the price of gas was in 1998-2000. MR. HUNT

responded. It was in the range of \$1.50 to \$2.00 in nominal dollars. TRUSTEE FRANK remarked gas was cheaper and easier to build than other types of energy plants.

MR. HUNT remarked that they have an integrated approach to analyzing fuels; they look at all the fuels, not just one at a time. They look at the global view. They offer the licensing of their software and practices to clients so they can do their own analysis. He referred Trustees to slide 26 in the presentation to show how their models are integrated for forecasting purposes.

DR. DONNELLY reported on Arctic gas. He stated that the buyer today and not the supplier controls the commodity price. He then gave a brief review of his background in geology and fossil fuels. He reviewed a map of the Arctic and the North Slope and their markets as well as the competing Canadian market, which has captured 90% of our incremental gas market in the U.S. DR. DONNELLY stated oil is 10-15 times more valuable than gas and is the driver for stranded gas. The economic assessments since 2000 of North Slope gas show both of those projects can't go on simultaneously. The Canadian gas will land ahead of the Alaska project by 3-4 years. That doesn't mean both won't be marketable or valuable.

TRUSTEE FRANK asked how much additional demand is in the market annually. DR. DONNELLY stated there are two markets to focus on, the Alberta market and the Chicago market. All of their assessments show that the Chicago market is the best place to go. He reviewed the economics and showed that it would depress the price of gas for at least two to three years both at the wellhead and in the market place, which will depress the pipeline value. TRUSTEE FRANK asked how fast the bcf demand is growing. The answer was very fast; the question was how fast could it be moved to market. DR. DONNELLY also stated in response to Trustee Frank's question that the Chicago market was more of a national market than the Alberta market. He then went on to explain a stranded pipeline scenario, where renters aren't available. Our domestic supply is decreasing, which will keep the demand high. DR. DONNELLY stated this gas pipeline would compete with every other incremental supply including LNG and Canadian.

MR. HUNT stated there was a faster decline in the Gulf of Mexico supplies. The U. S. dependence on continued growth in the Gulf of Mexico gas is being challenged by the faster depletion rates and lower rates of new discovery there. The higher fuel prices are forcing petrochemicals and energy intensive manufacturing offshore. The market in the U. S. is gas demand for power generation. Increasing demands will result in a flood of LNG imports; however, there are practical limitations on the liquification facilities that will constrain how much is available.

TRUSTEE FRANK asked for Global's expectation of how many bcf of LNG will come in over the next 15 years. DR. DONNELLY referred to page 31 of the presentation for their view. He stated the important key point for APFC investment purposes would be what happens when the gas starts to flow. At that time, LNG will probably provide about 15-20% of domestic demand at that point and it will be cartel priced. He further stated that the economics for long haul pipeline gas always beat LNG.

TRUSTEE FRANK referred to an article in *The Economist* about Paraguay gas and political issues. In the article they stated that after 2300 kilometers it's cheaper to go LNG. DR. DONNELLY stated there was a break over curve point for LNG, but that it depended on the local market, the amount of indigenous gas and the source of the LNG. TRUSTEE FRANK asked how much shipping distance to market was a factor for LNG. DR. DONNELLY replied that for most of the globally traded liquification capacity, re-gasified, shipping costs are 25-30% of the total. TRUSTEE FRANK then inquired if LNG was used from the slope into Valdez and the fact that it wasn't far from the west coast made a difference. DR. DONNELLY replied that it was expensive upstream of Valdez. They looked at this very rigorously two years ago for the Department of Revenue. LNG doesn't compete with long haul gas.

MR. HUNT outlined, the Global Energy Project Team for Trustees (page 32 of the presentation).

TRUSTEE FRANK asked about the relative strength between members of the gas cartel and the oil cartel (OPEC) in terms of worldwide production and how other powers would come into play. DR. DONNELLY said the gas cartel would be far stronger and more effective in maintaining the price for LNG than the oil cartel has been in maintaining the price for oil. The oil cartel lost market share when non-OPEC production was stimulated. He stated that OPEC only provides about 40% of the world production today, although about 60% of what is exported. The gas cartel, controls 75% today of world production. DR. DONNELLY remarked that Russia has made it very clear that they don't want reasonable price, they want the best price and they own 40% of the cartel export capacity, far more than any other individual mid- Eastern country. The long-term leverage to control price is very strong. Their ability to liquefy a lot of gas into the market isn't going to happen due to economics.

TRUSTEE FRANK asked how many were in the group of the gas cartel. DR. DONNELLY replied there were about 15. LNG is difficult to store; it's cryogenic and not open access. There are all sorts of other issues as well to LNG competing.

MR. BURNS asked if he was correct in understanding that was the LNG was re-gasified it couldn't go through the same distribution system. DR. DONNELLY

replied that was correct because FERC has compositional rules for long haul pipelines. That is one of the major issues being discussed regarding the commercial viability of LNG.

MR. HUNT reiterated for Trustees that his firm is a specialist in the upstream part of the market, because that is essential to be able to advise their clients in the downstream. They specialize in being able to look across the entire value chain of fuels and energy analysis. They would bring “street smarts” to the Fund.

MR. SPAGNOLI stated PFM would look at this project from the top down approach and how this fits into the Fund’s overall portfolio. They would evaluate the Fund’s investments on the efficient frontier and how this asset would perform. He stated the question becomes, does it increase risk, does it improve efficiencies of the Fund’s overall investments and how does it correlate to what the Fund has now. They would give a range of probabilities as to how this asset would perform. PFM sees it as a hybrid between private real estate and private equity with components of fixed income. He added the interest in this asset class is growing by both private and public funds.

MR. BONOW stated in the past investments were in existing projects for quick payoffs. There are unique characteristics to this project; a quick payoff is not one of them.

TRUSTEE FRANK said he sees a fixed rate of return with no up side and default risks in a regulated industry, which sounds more like a bond than private equity. He asked what is wrong with his thinking.

MR. CONWAY stated there is a long ramp-up period, which does not occur with a fixed income product. There are various phases of this project such as the development phase. Investment in that phase would take years to get out of the J-curve.

TRUSTEE WOHLFORTH asked to hear some good things about the investment in a regulated utility. MR. BONOW answered that you had to look at the totality of the project. There is a choice as to what part of risk the Fund wants to invest in. TRUSTEE FRANK remarked that he was looking at it post-construction.

TRUSTEE WOHLFORTH stated we would most likely be part of a financing consortium prior to construction. DR. DONNELLY stated the price of the commodity is the driver, not the cost of the project. There will be a 3-4 year pre-construction period where permitting is done, aboriginal issues are answered and a front-end engineering (FEE) study is done before a lot of the other questions can be answered. Where the Fund participates (on the front-end vs. later) determines in part what can be recovered on the embedded return on equity. He added that Trustees need to look at the supply/demand fundamentals for the next ten to

fifteen years. He further remarked that the Fund's financial interests are not necessarily aligned with the State's and perhaps the Fund could get some preferential treatment. Producers have a different risk profile with federal guarantees and so forth.

CHAIR BRADY asked if the presenters had any knowledge of tax-exempt entities that owned pipelines. He wondered if pipeline depreciation could be sold or traded to for profit corporation partners for something. MR. BONOW replied that was fairly common in the past, but the laws have changed and there is no clear avenue right now to sell that tax benefit. MR. MARGOLIS remarked that the different potential investors have very different tax situations. He reviewed the different interests and tax situations. He added that Chair Brady makes an important point; there is a divergence of interests and is there a way to maximize the efficiency on that basis.

TRUSTEE WOHLFORTH asked Global Energy to respond to the Beluga gas deal that they were a part of and on the stranded gas pipeline work they did for the Department of Revenue if it is not confidential. DR. DONNELLY stated that in the mid-1990s Global Energy was approached by Anchorage Municipal Power and Light to help them assess the economics of investing in Shell, who was divesting of its interests in the Beluga fields. Global advised them on the upstream economics to establish the remaining value. He went into the economic assumptions and stated it would be interesting relative to this project to look at how the gas was used. There was a balancing issue between the producers and the utility. The issue was how the gas flowed to market, not how much was in the ground. It was a prudent acquisition. It was the first large acquisition by a municipality of in-ground reserves. DR. DONNELLY reviewed all of the financing structures they looked at. DR. DONNELLY further remarked that from what he knows about the negotiated contract with the current Governor and producers, it is a very reasonably structured contract with the producers taking on the risk of shipping.

CHAIR BRADY asked that given an 80% financing structure, and the expected timing of the competition what they would see as to who would be involved in traditional financing costs and if there might be any issues looking at the exposure of the financing capabilities. MR. MARGOLIS stated the ultimate economics of the financing package might be better if the different investors lined up differently. If the federal guarantee can be leveraged and where the Fund fits is a good question. MR. MARGOLIS stressed again that this investment would be its own asset class – it is unlike anything else the Fund is invested in.

TRUSTEE WOHLFORTH asked if anyone knew enough about the guarantee to know whether or not the federal government will be a negotiating party to the overall deal. MR. BURNS stated it would be regulations drafted; that was part of the legislation.

TRUSTEE FRANK stated that Exxon, Conoco and BP's balance sheets are on the line to back up the debt the issue that is guaranteed by the federal government. Would the Fund balance sheet need to back up its debt before the federal guarantee? MR. BONOW stated the Fund was not allowed to put the Corpus of the Fund on the line. The question is if the Fund is ultimately only looking for a return on the 20% or over time does the Fund want to analyze the 80% to ensure the entire project works. If it's the former there is a lot of flexibility. The risk profiles are entirely different.

TRUSTEE WOHLFORTH remarked that before any of those questions are decided, Trustees should know if Fund participation is necessary to the deal. MR. BURNS stated that the guaranteed debt doesn't need any help, but what is the mechanism for filling cost overruns is more of an issue. It's how the residual risk is allocated or re-allocated. TRUSTEE FRANK stated what we think will work may not be okay with the federal government. MR. BONOW doesn't believe the federal government did not envision these questions. Any federal projects are going to have strings attached.

MR. BONOW asked to proceed to key issues they identified. MR. SPAGNOLI began with investment policy issues. How does this project fit into the Fund's diversification goals and when does the Fund invest is a question to ask. Another issue is the impact on realized gains and dividend payments, as they would be affected by this project.

MR. MARGOLIS compared this project to real estate in the Fund portfolio. Monitoring and transparency issues would compare and can be learned from.

MR. SPAGNOLI touched on risk at the micro and macro levels and how this project fits into the overall asset allocation. Most large funds treat this type of project as a separate class.

MR. MARGOLIS talked about asset valuation and fair price going into the project and over time, as well as an exit strategy where you get money back with an expected return. At the earliest stages of a deal, using capital market assumptions that this is a fair investment given the Fund's asset allocation to go forward. Additionally, there is projection going forward regarding returns.

TRUSTEE FRANK asked how the annual reporting of returns would be measured. MR. MARGOLIS answered it would be similar the way private equity or real estate valuations are measured. TRUSTEE FRANK asked if our reported rate of return would be diminished by what was invested by four or five years. MR. SHAFER stated that was correct. MR. BARHTOLOMEW added that this type of investment makes sense if a fund has patience and does not have a liquidity drive because the return in the long-term is significant enough to offset

the short-term diminished return. MR. SPAGNOLI added it goes to the scale of the investment and points to the difference between pension funds and endowments. CHAIR BRADY stated that this investment would need to be a standalone, not co-mingled investment because the public would monitor it closely.

MR. MARGOLIS mentioned potential problems and outcomes of the project and the timing of an exit strategy that would need to be addressed. He reiterated that the value and risk of the pipeline project depend more on the price of the oil or gas than the cost of the project. The Fund's success as an investor in the project depends on if Fund interests are aligned with project interests in a way that keeps the pipeline full of gas. The buyers' interest is the biggest driver of cost and reward.

DR. DONNELLY reviewed slides 47-51 of the presentation. He emphasized that the multiple gas delivery markets - the Chicago market, the Alberta market and interconnected markets would influence the value of the pipeline. The deal structure and whether or not the pipe can be kept full are critical. The economics of the stranded gas are tied to oil, which is the reason the tax package is so critical in this deal. The value of oil is 10 times more valuable than gas.

MR. HUNT reviewed the elements they would bring to the Board for Trustee education. They would focus on understanding the deal that gets put on the table and the issues associated with that deal, then looking at the fundamental market drivers and economics that envision how the deal will perform over time. They would walk with the Trustees down the path of understanding all of the pros and cons and tradeoffs of the choices available, so they can make the best-informed decisions. He emphasized the strength of their Global and PFM companies and staff.

TRUSTEE FRANK asked for a review of a similar project they may have advised on. DR. DONNELLY reviewed the Pacific Corp and Oregon Trans Indian Pipeline projects, as well as the Wyoming pipeline project and the Rocky Express Pipeline. PFM's experience has largely focused on very large public power providers, such as New York Power Authority. They serve only in the fiduciary capacity of providing advice. He stated they advised on 27 projects in 2005 and they have a growing number of clients.

DR. DONNELLY inquired about the percentage of royalty income the Fund would receive and who would be shipping the gas. He asked what happened to the Fund upstream converted working interest and who would be moving it to market.

MR. BURNS stated he believed the Fund would continue to receive a wellhead based royalty on the Fund's 25%. DR. DONNELLY remarked that the wellhead

would be a netback. MR. BARTHOLOMEW noted that the State policy on how to handle royalty is set up stream of the Permanent Fund, so the Fund would not weigh in on the policy even if it were to affect royalty value because the Fund's responsibility is financial investment once we receive the money. He added that when we invest our principal in a pipeline, if there are issues that affect the value of the pipeline the Fund has a fiduciary duty to be involved in that.

TRUSTEE HUDSON remarked that 8-10 years ago the State was looking at gas to liquids on the slope. He asked if Dr. Donnelly was involved in this. He said yes, but the economics didn't work at the time.

In response to a question by Rick Shafer, DR. DONNELLY stated the price of gas relative to oil in the last five years averages seven to one in the continental U.S. and there is always economic linkage between oil and gas.

CHAIR BRADY thanked the presenters from both Global Energy Advisors and PFM Asset Management. MR. MARGOLIS stated they appreciated the rigor of the process.

GAS PIPELINE ADVISOR SELECTION

CHAIR BRADY asked Trustees if they would like to set a procedure, have a discussion, or make a motion to select an advisor.

MOTION: TRUSTEE WOHLFORTH moved to select PACE Global Energy as the gas line advisor to the Fund. TRUSTEE HUDSON seconded the motion.

DISCUSSION: MR. BURNS reminded the Trustees this selection was primarily to engage an advisor for the education component and investment analysis, but not necessarily for the portfolio. TRUSTEE WOHLFORTH concurred that was his understanding. He felt PACE gave an excellent presentation with a lot of history and detail and was clearly better than the second group. CHAIR BRADY stated he was of the opposite opinion. He further stated, however, that he would vote with the rest of the Trustees if the rest of them were in agreement. CHAIR FRANK stated he liked the morning presentation. He did like the Global Energy part of the presentation more than the PFM part of the second group. Overall, he was very impressed with both groups, but he favored PACE. TRUSTEE HUDSON concurred, but thought there might be an opportunity to use Global Energy later on. TRUSTEE HUDSON, though he favors PACE, will be sorry to miss Global Energy's expertise. He noted their Alaska experience.

CHAIR BRADY asked if it was unanimous with the exception of him.

A roll call vote was taken. The motion was approved unanimously.

MR. BARTHOLOMEW stated he would make the notifications and begin work

on the contract immediately. He remarked that the RFP was worded in such a way that the proposers all knew there may be a role for more than one over time.

TRUSTEE COMMENTS

TRUSTEE HUDSON stated today's presentation was very informative.

TRUSTEE FRANK commented that he would like to concentrate on gas line investments and the Greenfield aspect in the educational process.

FUTURE AGENDA ITEMS

MR. BURNS noted that with the Chair's approval they would allot time on the May agenda for an educational presentation from PACE on infrastructure investing.

ADJOURNMENT

The meeting was adjourned at 5:15 p.m.

APPROVAL OF MINUTES

/s/ Carl Brady, Chair, Board of Trustees

Date: May 24, 2006