**INVESTMENT ADVISORY COUNCIL**
**Wednesday, October 13, 2010**

**MEETING NO. 380**

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| **Members present:** | Thomas Barnes<br>Thomas Fiore, representing Brenda Sisco*<br>Michael Freeman<br>David (Duke) Himmelreich<br>Denise L. Nappier, Treasurer**<br>David Roth<br>Joseph (Joe) D. Roxe, Chairman<br>Carol Thomas*<br>Peter Thor |
| **Absent:** | Stanley (Bud) Morten<br>William Murray<br>Sharon Palmer |
| **Others present:** | Howard G. Rifkin, Deputy Treasurer<br>Linda Hershman, Assistant Deputy Treasurer/Chief of Staff<br>M. Timothy (Tim) Corbett, Chief Investment Officer<br>Lee Ann Palladino, Deputy Chief Investment Officer<br>Pamela Bartol, Assistant Investment Officer<br>Wayne Hypolite, Executive Assistant<br>Catherine LaMarr, General Counsel<br>Shelagh McClure, Director of Compliance<br>Meredith Miller, Assistant Treasurer-Policy<br>Linda Tudan, Executive Assistant<br>Winifred (Winnie) Scalora, Administrative Assistant |
| **Intern:** | Matthew Cole, Office of Policy and Management |
| **Guests:** | Joseph Barcic, Mercer Investment Consulting<br>Bruce Brittain, Pacific Investment Management Company LLC<br>Sean Gill, NEPC, LLC<br>Will Green, Loop Capital Markets, LLC<br>Robin Kaplan-Cho, Connecticut Education Association<br>Harvey Kelly, Leumas Advisors<br>Louis Laccavole, SOC Teachers' Retirement Board<br>Jacqueline Lyons, State Street Bank & Trust<br>John Minahan, NEPC<br>Kevin Norton, BNY Mellon<br>Melody Rollins, Pacific Investment Management Company LLC<br>Cynthia Steer, Rogerscasey<br>Craig teDaits, State Street Bank & Trust |

*** Arrived at 9:06 a.m.**
**** Arrived at 9:50 a.m.**

Chairman Joseph Roxe called the Investment Advisory Council ("IAC") meeting to order at 9:00 a.m. There was a quorum present at 9:05 a.m.

**Chief Investment Officer's Update on the Market and the CRPTF Final Performance for the Month ended August 31, 2010**

M. Timothy Corbett, Chief Investment Officer ("CIO"), began his remarks by providing an update on the capital market environment, its impact on the performance of the Connecticut Retirement Plans and Trust Funds ("CRPTF") and the economic outlook.

Mr. Corbett commented about the National Association of State Investment Officers ("NASIO") Conference, which he recently attended. He said that most of the discussion revolved around pension funding gaps, the feasibility of the actuarial return assumption and the viability of defined benefit plans. Mr. Corbett said that a number of the funds' officers stated they were evaluating or acquiring sophisticated global third-party risk management systems.

Mr. Corbett then reported on the performance for the CRPTF for the month ended August 31, 2010. He stated that the Combined Investment Fund decreased 1.5 % with pension fund assets at $22.3 billion, a $0.5 billion decline for the month ended August 31, 2010, and that performance for the 2010 calendar year increased 0.8%.

David Roth asked about ways to approach the underperformance of the Mutual Equity Fund ("MEF"), to which Mr. Corbett stated that two of the managers within the small to mid-cap space had been terminated and that another manager within the large-cap space had been put on watch. Mr. Corbett added that he believed the large liquid markets were better served by having predominately passive low-cost strategies, and that he was less confident in quantitative strategies in the near term. Chairman Roxe posed several questions regarding the actuarial return assumptions and the viability of the CRPTF's return assumptions. Mr. Corbett responded that many pension plans were moving towards lower actuarial return assumptions. Deputy Treasurer Rifkin stated that the Office of the Treasurer ("OTT") had marginal input on the creation of the return assumption on the portfolio, and he commented on the actuarial analysis process.

**Approval of Minutes of the September 8, 2010 IAC Meeting**

Chairman Roxe asked for comments on the Minutes of the September 8, 2010 IAC meeting. **There being no comments, a motion was made by Mr. Himmelreich, seconded by Mr. Freeman, that the Minutes of the September 8, 2010 IAC meeting be accepted as drafted. The motion was passed with the exceptions of Thomas Barnes and Carol Thomas who abstained due to their absence from the last meeting.**

**Tail Risk Management Presentations**

Mr. Corbett provided opening remarks on tail risk management issues facing institutional investors for the presentations by Pacific Investment Management Company LLC ("PIMCO") and NEPC, LLC ("NEPC"). Mr. Corbett then introduced Bruce Brittain, PhD, Executive Vice

President and member of the Product Management Group, PIMCO; and John Minahan, Senior Investment Strategist, NEPC.

**An Introduction to Tail Risk Hedging**

Mr. Brittain provided a presentation entitled, "An Introduction to Tail Risk Hedging." He stated that a tail risk hedging program should be a line item in the asset allocation with the investment objective of establishing a maximum loss threshold for the investment portfolio. Mr. Brittain said that a tail risk hedging program included: an investment or hedging horizon, usually a year; a loss threshold, usually 15% to 20% decline; knowledge of the risk characteristics of a specific portfolio; and a cost. Mr. Brittain then discussed the purpose of tail risk hedging programs which is removal of the left-hand tails or losses and the ability to increase risk and receive higher incremental returns with the knowledge that the left tail had been addressed. In response to Deputy Treasurer Rifkin, Mr. Brittain agreed that globalization had recently begun to have an empirical impact on volatility, and he noted that the CRPTF's portfolio's construction with more global exposure would aid in managing tail risk and reducing volatility. He then commented on the different types of hedging strategies: equity index options, interest rate related options, credit options, currency options and commodity options. Treasurer Nappier asked about active management of the hedges. Mr. Brittain answered that PIMCO's strategy is to actively manage the hedges to reduce overall costs.

In conclusion, Mr. Brittain said that hedging does incur a cost. He said this cost may be offset by institutional investors that re-risk the portfolio, adopt an offensive approach to risk management and view hedges as a source of liquidity during a market crisis. In response to Chairman Roxe, Mr. Brittain stated that while some contracts were being traded on exchanges where counter-party risk was minimal, the bulk of the positions were traded over-the-counter and were exposed to counterparty risk.

**Tail Risk Management: The Case for Caution**

Dr. Minahan provided a presentation entitled, "Tail Risk Management: The Case for Caution." He began by commenting that tail risk hedging was a judgment call based on the risk tolerance of the institutional investor. Dr. Minahan defined tail risk as the possibility of extremely poor returns and tail risk management as the process of attempting to avoid these outcomes. He discussed other strategies for managing tail risk, which included not taking any risk and broad diversification. Dr. Minahan said that the CRPTF, a broadly diversified portfolio, was currently utilizing implicit tail risk management. He discussed two widely used methods of tail risk hedging, scenario-based hedging and an option-based approach. Dr. Minahan also said that while scenario-based hedging strategies were explicit, they involved less risk than the options-based hedging strategies, but added that caution was important in explicit tail risk management because it was unknown whether accurate forecasting was possible. He said that the downside of scenario hedging is that the scenario may not materialize and/or another unanticipated scenario may come forth. Dr. Minahan discussed the costs associated with option programs and then provided a scenario of a typical portfolio that was hedged versus the same fund unhedged over a 30-year period, and noted that the cost of the hedge was about 60 basis points. He pointed out that in order to protect a portfolio, there had to be a willing counterparty to take on the risk; that counterparty must be able to offset that risk, and during extreme market events there were no natural counterparties. Therefore, Dr. Minahan said that a cautious approach was warranted. Discussion ensued regarding hedging strategies, and it was noted that the structure of the Liquidity Fund provided some tail risk protection.

Chairman Roxe stated that both points of view were valuable. He said that he would like to continue discussion about this concept and also discuss the viability of hedging some portion of the CRPTF at the next IAC Meeting. In response to Ms. Thomas, there was discussion about the CRPTF's actual current level of volatility, the CRPTF's current approach to tail risk management and the high cost of explicit tail risk management.

**Comments by the Treasurer**

Treasurer Denise Nappier began her remarks by commenting on Fiscal Year ("FY") 2011's second quarter's strong investment returns. She then presented a FY 2010 recap reporting on the global markets' performance and the many accomplishments of the CRPTF. Treasurer Nappier discussed the CRPTF's implementation of its investment strategy and the extensive corporate governance activity during FY 2010. She emphasized that while challenges remained over the next few years, there was no doubt that the markets had significantly improved. Treasurer Nappier reminded all that for the fiscal year ended June 30, 2010 the CRPTF twelve-month performance increased 12.88%, outperformed its benchmark and that the CRPTF ranked within the 35th percentile for the 12-year horizon ended July 30, 2010, meaning it performed better than 65% of its peers. In closing, she thanked the IAC members for their ongoing review and input every month creating constructive dialogue regarding very important issues. Treasurer Nappier also thanked the consultants and the OTT staff for their contributions over the last fiscal year to help accomplish these achievements. Chairman Roxe thanked the Treasurer for the wonderful summary. Mr. Freeman thanked Treasurer Nappier for her diligent efforts in overseeing the CRPTF.

**Corporate Governance and MacBride Compliance**

Meredith Miller, Assistant Treasurer - Policy, provided a report on Corporate Governance and MacBride Compliance for the quarter ended June 30, 2010. Ms. Miller reported that there were 8,456 domestic proxy votes cast on behalf of the CRPTF of which 28.9 % were voted against management, and that the domestic proxies for the quarter were posted on the Website. She also reported that there were 3,673 international proxy votes cast and that 10.79 % were voted against management. Ms. Miller said that all of the international managers voted in compliance with the CRPTF proxy voting policies.

Ms. Miller then commented about the OTT continued work on corporate governance reform including a recent vote against Massey Energy Company. With the 2011 proxy season, she said that the OTT co-filed its first shareholder resolution, requesting Hewlett Packard to provide a policy on succession planning. Finally, Ms. Miller stated that Treasurer Nappier's work on the access to the proxy rule had been influential in the final rule.

Regarding MacBride Compliance, Ms. Miller stated there were no violations in accordance with MacBride principles. In response to Mr. Roth's question, Ms. Miller said that the CRPTF only works with companies on the corporate governance issues and there was never any interaction regarding investments. Treasurer Nappier added that the CRPTF did not have a relationship with the boards of companies such as the California Public Employees' Retirement System, which make investment decisions, and that the CRPTF was well respected and had an excellent reputation with respect to the corporate governance issues. Chairman Roxe complimented Ms. Miller's report.

**Other Business**

Chairman Roxe presented the IAC Meeting Schedule for the 2011 Calendar Year. He invited IAC members to submit agenda items for the November 10, 2010 IAC meeting.

**Comments by the Chairman**

Mr. Freeman and Chairman Roxe thanked Treasurer Nappier for her hard work.

There being no further business, the meeting was adjourned at 11:40 a.m.

**An audio tape of this meeting was recorded.**

**Respectfully submitted,**

Denise L. Nappier

**DENISE L. NAPPIER**
**SECRETARY**

**Reviewed by**

J Roxe

**JOSEPH D. ROXE**
**CHAIRMAN**