NOTE: These minutes were approved and executed at the February 22, 2013 Independent Investment Committee meeting.

Independent Investment Committee
January 18, 2013

Public Minutes

New Hampshire Retirement System
54 Regional Drive
Concord, NH 03301

Committee Members: Harold Janeway, *Chair;* David Jensen; Patrick O'Donnell; Catherine Provencher; and Hersh Sosnoff.

NHRS Trustees: Richard Gustafson, Ph.D.; David McCrillis; Kate McGovern, Ph.D.; and George Walker.

Staff: Larry Johansen, *Director of Investments*; Jeff Gendron, *Investment Officer*; Scott Needham, *Investment Analyst*; and Greg Richard, *Investment Analyst.*

NEPC, LLC: Kevin Leonard, *Partner and Senior Consultant*; Sean Gill, *Partner*; and Kristin Reynolds, *Partner.*

Mr. Janeway called the meeting to order at 9:02 a.m. He surveyed the Committee for comments on the draft minutes of the December 21, 2012 Investment Committee meeting. As there were none, a motion to approve the public and non-public minutes of the December 21, 2012 Investment Committee meeting was made by Mr. Jensen and seconded by Mr. O'Donnell. The motion carried unanimously.

Mr. Johansen referred to the Work Plan dated December 26, 2012. He noted that the fourth quarter of Fiscal Year 2013 has been added to the Work Plan for the Committee's consideration and briefly reviewed the items included for the fourth quarter. He commented that the Work Plan is flexible and subject to revision by the Committee. A motion was made by Mr. Jensen and seconded by Mr. Sosnoff to approve the Work Plan for the fourth quarter of Fiscal Year 2013. The motion carried unanimously.

Mr. Johansen briefly reviewed the performance of the Marketable Investments portfolio for periods ending December 31, 2012. For the fiscal year-to-date through December 31, the Marketable Investments returned 7.8%, exceeding the return of its custom benchmark of 7.0% by 80 basis points. For the one-year period ending December 31, the

Marketable Investments returned 14.5%, exceeding the return of its custom benchmark of 13.2% by 130 basis points. For the three-year period ending December 31, the Marketable Investments returned 8.7%, exceeding the return of its custom benchmark of 8.6% by 10 basis points.

Mr. Johansen provided a brief update on the transition of assets from the U.S. small cap core equity portfolio formerly managed by C.S. McKee, noting that transition trading is expected to commence on Tuesday, January 22nd and is expected to be substantially completed by market close on Friday, January 25th. Mr. Johansen indicated that based on preliminary conversations with Arden it is beneficial to implement the Committee's decision sooner rather than later and absent any reservations from the Committee he will proceed with the transition. In response to a question from the Committee, Mr. Johansen noted that staff has had and will continue to have discussions with U.S. small cap core equity manager Segal Bryant & Hamill regarding relative underperformance.

Mr. Johansen noted that that preliminary market value of the NHRS Total Fund was slightly in excess of $6 billion at December 31, 2012.

Mr. Joseph Paul, Chief Investment Officer of North American Value Equities; and Ms. Elizabeth Smith, Senior Managing Director of Public Funds, of AllianceBernstein provided a brief introduction of themselves and their firm. They referred to "The Case for Stocks" presentation, dated January 18, 2013. The presentation focused on AllianceBernstein's expectation that U.S. companies will not experience earnings disappointments in 2013. A lengthy discussion with the Committee followed.

In response to comments and questions from the Committee, Mr. Paul commented that he does not anticipate an increase in inflation in the short-term, given the current record-high levels of net profit margins. He noted that such an environment of low inflation should keep interest rates low. He added that any rise in interest rates in the near-term would be in response to strong economic growth, which would be a positive for stocks and stock valuations.

Mr. Paul commented that AllianceBernstein's long-term return expectation for U.S. stocks is approximately 8%, which is lower than historic long-term returns. He remarked that the firm's current bullish position on U.S. stocks is based on the return potential of stocks relative to other investment opportunities. Mr. Paul noted that a stagflationary environment would have the largest negative impact on this bullish view. He further commented that he does not see inflation as an immediate threat, given the slack in U.S. labor markets among other factors. Mr. Paul expressed his view that the S&P 500 Index is currently 30 to 40% undervalued.

Mr. Paul Lohrey, Managing Director; Mr. Scott Williamson, Managing Director; Mr. Douglas McNeely, Managing Director; Ms. Shannon Nelson, Associate; and Mr. Daniel O'Connor, III, Managing Director, of BlackRock provided a brief introduction of themselves and their firm. Messrs. Lohrey and Williamson referred to the "New Hampshire Retirement System" presentation, dated January 18, 2013. The presentation focused on the proliferation of passive investing and electronically-traded funds (ETFs) and the related impact on active portfolio management. A robust conversation with the Committee followed.

In response to questions from the Committee, Mr. Lohrey commented that the inability of the overall active portfolio manager community to outperform their respective benchmark indices over a 5-year period is persistent, regardless of the 5-year period under consideration. He also discussed the destabilizing impact that leveraged ETFs have on the markets. He noted a recent BlackRock study which showed that active managers featuring strategies that weigh their portfolios to reflect certain stock characteristics have shown the ability to consistently add alpha over time, net of a reasonable fee.

In response to questions from the Committee, Mr. Williamson noted the trend among institutional investors to implement barbell portfolio strategies featuring low-cost beta strategies coupled with alpha-seeking actively managed portfolios.

Mr. Edmund Bellord, member of the Asset Allocation Team; and Mr. Tom Smith, Client Relationship Manager, of GMO provided a brief introduction of themselves and their firm. They referred to the "New Hampshire Retirement System" presentation dated January 18, 2013. The presentation focused on investing in a low yield, low growth environment. A lengthy conversation with the Committee followed.

In response to questions and comments from the Committee, Mr. Bellord noted that the Swiss National Bank's balance sheet expansion has largely featured purchases of foreign securities, unlike the expansion of the balance sheets of the U.S. Federal Reserve and the European Central Bank. He expressed his opinion that global quantitative easing efforts will not result in inflation as these efforts have simply increased bank reserves, in turn lowering the discount rate for investors.

In response to questions regarding GMO's Benchmark Free Allocation Strategy, Mr. Bellord remarked that the strategy's shorting of the

Chinese market is largely due to the firm's expectation that growth in China will slow as the country continues moving towards a consumer-driven economy, a historically difficult transition.

Responding to questions about GMO's return expectations for U.S. stocks, Mr. Bellord noted that the main reason for GMO's forecast being lower than consensus is that GMO feels that the current high profit margin levels are unsustainable. He added his opinion that systematic put selling is among the more attractive investment opportunities in the current market environment, noting however that this strategy features the use of leverage which has various risk considerations.

Ms. Reynolds referred to the "An Alternative Approach to Portfolio Construction – Foundation Client" presentation dated January 18, 2013. The presentation focused on the unique portfolio construction approach taken by a large NEPC foundation client.

In response to questions regarding the risks associated with the leveraged approach of this client, Ms. Reynolds referenced the cash needs this client faces when markets move in unfavorable directions. She also noted that a sharp spike in interest rates would be among the worst case scenarios for this approach, as borrowing rates would increase at the same time that the client's bond portfolio lost significant market value.

Ms. Reynolds commented that the foundation client's portfolio is traded daily to maintain its target volatility, but noted that target allocations are not changed often. She noted that approximately 65% of the overall client portfolio is illiquid. Ms. Reynolds cited a large portfolio drawdown between 2000 and 2002 experienced by this client as one of the main reasons that the client initially began discussing this investment strategy. The client portfolio had been allocated 80% to equities and 20% to fixed income prior to the implementation of the current approach.

Mr. Leonard and Mr. Gill referred to the "An Alternative Approach to Portfolio Construction – Public Fund Client" presentation dated January 18, 2013. The presentation focused on the unique portfolio construction approach taken by a large NEPC public fund client.

In response to questions from the Committee, Mr. Leonard indicated that the overall portfolio management costs associated with this portfolio are lower than median, given the synthetic nature of the portfolio's equity exposure. He noted that the large allocation to alternative investments, including hedge funds, increases portfolio expenses however.

The Committee discussed the presentations delivered at the meeting and the related discussions, and agreed that the meeting was very informative and well-structured. The Committee agreed to send their reactions to and thoughts about the meeting to Mr. Johansen for future discussion.

On a motion by Mr. O'Donnell, seconded by Mr. Jensen, the meeting adjourned at 1:56 p.m.