South Carolina Retirement System Investment Commission Meeting Minutes

February 8, 2018 9:30 a.m. Capitol Center 1201 Main Street, 15th Floor Columbia, South Carolina 29201 Meeting Location: Presentation Center

Commissioners Present:

Dr. Rebecca Gunnlaugsson, Chair Dr. Ronald Wilder, Vice Chair Ms. Peggy Boykin, PEBA Executive Director Mr. Allen Gillespie Mr. Edward Giobbe Mr. Reynolds Williams (via telephone) Mr. William H. Hancock Mr. William J. Condon

I. CALL TO ORDER AND CONSENT AGENDA

Chair Rebecca Gunnlaugsson called the meeting of the South Carolina Retirement System Investment Commission ("Commission") to order at 9:30 a.m. Mr. Edward Giobbe made a motion to approve the proposed agenda as presented. Dr. Ronald Wilder seconded the motion, which was approved unanimously.

The Chair referred to the draft minutes from the Commission's December 7, 2017 meeting as presented and asked whether there was a motion to approve the minutes. Dr. Wilder made a motion to approve the minutes as presented. Mr. Giobbe seconded the motion. Mr. Bill Condon noted that there was a scrivener's error in the third paragraph of the draft minutes. Mr. Condon made a motion to adopt the minutes as amended to correct the error. Dr. Wilder seconded the motion, which passed unanimously.

II. CEO's REPORT

Mr. Michael Hitchcock, Chief Executive Officer, reminded the Commission that the deadline to file their annual Statements of Economic Interest is March 30, 2018. He then distributed the Code of Ethics form required by the Commission's Ethics Policy and requested that the Commissioners review, sign and return the forms. He also announced that the 2018 Commission meeting schedule previously approved by the Commission has been posted on the website.

Mr. Hitchcock then updated the Commission on the fiduciary audit, which is required every four years by state law. The State Auditor selected Funston Advisory Group to perform the

audit, which will begin in May. He reminded the Commissioners that Funston had conducted the last fiduciary audit and noted that it will be interesting to see how they think the Commission has progressed since the last fiduciary audit.

Lastly, Mr. Hitchcock reported that RSIC would like to formally endorse the CFA Asset Manager Code of Professional Conduct, which is a code of professional conduct for asset management firms. The asset management firms can choose to adopt the standard of conduct. He noted that currently 19 of our managers currently claim compliance with the Code. The purpose of the Code is to provide asset managers a means to demonstrate in a uniform manner that they are acting as fiduciaries and in their client's best interests. Mr. Hitchcock stated that unless there are any objections, RSIC wants to sign on as endorser and work it into our Operational Due Diligence process. There were no objections noted. This concluded Mr. Hitchcock's report.

III. CIO's REPORT

The Chair recognized Mr. Geoffrey Berg, Chief Investment Officer ("CIO"), to provide the CIO's report. Mr. Berg began by addressing the recent market volatility. He explained that, even though the market had experienced a 10 percent decline during the previous week, the market was still up over 20 percent from the end of 2016 and was up more than 35 percent from the end of 2015. Mr. Berg noted that the Commission's 2015 decision to increase equities exposure had improved overall Plan ("Plan" or "Portfolio") performance despite the recent volatility. He also emphasized that the market volatility is illustrative of the importance of maintaining a diversified portfolio.

Mr. Berg then introduced Mr. David King, Reporting Officer, to present an investment performance update. Mr. King stated that fiscal year-to-date through December 31, 2017, the Plan was up 7.51 percent versus a policy benchmark of 6.69 percent, with a Plan value of \$31.8 billion. Mr. Berg added that all of the benefit payments required to be made under the Teacher & Employee Retention Incentive ("TERI") Program, by statute, need to be completed by July of 2018. Ms. Peggy Boykin noted that an additional \$450 million will need to be paid, and, in response to a question, clarified that, while the program is still open, all participants will be required to exit the TERI Program as of June 30, 2018.

Mr. Hitchcock asked Mr. King for a 'flash' performance report through the first part of the week prior to the Commission meeting. Mr. King explained that, from the beginning of the year through February 6, 2018, the estimated Plan return was 3 percent, and added that the unofficial, estimated return for the fiscal year was approximately 6.6 percent. Mr. Hitchcock inquired about the status of the Standard & Poor's 500 Index ("S&P") for the month-to-date. Mr. Peter Woolley from Meketa Investment Group responded that the S&P was currently down by 5 percent during that time period.

Next, Mr. Hitchcock discussed the development of the Annual Investment Plan ("AIP"). He began by discussing the purpose of the AIP and how it relates to the Statement of Investment Objectives and Policies ("SIOP"). Mr. Hitchcock explained that his understanding is that the Commission should be providing the CIO with the SIOP, which the CIO will, in turn, use to create the AIP. He stated that the goal of the SIOP and AIP is to keep asset allocation in constant focus, but recommended that the Plan's strategic asset allocation needs to be more permanent as we move forward. Mr. Hitchcock stated that Mr. Berg will be providing a draft AIP to the Commission by April 1, 2018, and the AIP will need to be adopted by the Commission before May 1,2018. He added that Mr. Berg and Mr. Robert Feinstein, Managing Director, will be working on initiatives that will be included in the draft AIP. Mr. Hitchcock stated that his goal is to shift the focus of developing the AIP from strategic, long-term plans to action items for RSIC Staff ("Staff") for a particular year.

Mr. Berg then shifted the discussion to three initiatives that he would like Staff to focus on during the upcoming fiscal year. First, Mr. Berg stated that he would like to build out the investment risk function by developing new tools for use by both the Investment Team and the Commission that will provide a different perspective on risks to the Plan. The second initiative identified by Mr. Berg called for the Investment Team to continue evaluating the mix of fixed and variable costs throughout the Portfolio, and pursuing opportunities to improve the cost structure of the investment program. Finally, Mr. Berg stated that he would like to evaluate currency hedging options. Mr. Berg stated that he intended to engage Meketa's expertise on how other plans are implementing currency hedging and how it could be integrated into the Portfolio.

Mr. Berg began a discussion of the Portfolio's risk management function. He introduced RSIC's Risk Management Team ("Risk Team"): Mr. James Wingo, Senior Officer, and Mr. Jonathan Graab, Senior Risk Analysist. Mr. Berg explained that he had asked that the Risk Team shift their focus to a top-down strategic approach to Plan risk. Mr. Berg analogized Plan risk to a mosaic in which each tile is a different facet of the Plan's risk portfolio.

At 9:57 a.m., Mr. Allen Gillespie joined the meeting.

Continuing his analogy, Mr. Berg stated that his goal for the first tile of the mosaic was to create a simple risk benchmark that would show how portfolio risk reacts to market conditions in real-time. Mr. Berg then asked Mr. Graab to provide a presentation on the Risk Team's recent work. Mr. Graab began by stating that the Risk Team had transitioned Staff's approach to risk modelling from attempting to understand an investment manager's bets to modelling strategic allocation. He explained that comparing the Plan's risk profile to a 70/30 stock-to-bond portfolio benchmark works well in accounting for market risk and interest rate risk. After explaining elements of the Risk Team's approach, Mr. Graab stated that the greatest advantage of this revised approach is that it captures more than 90 percent of portfolio

volatility, operates in real-time, identifies asset class contributions to risk, and provides a flexible framework for modelling outcomes.

Mr. Graab noted some considerations to the revised risk approach as well, including that the approach does not identify risks associated with manager-specific active overweights and underweights. Mr. Berg added that the Plan's new approach to risk will ensure that active managers are not mirroring an index but adding value through unique investment theses. Mr. Graab concluded by noting that Staff will now be utilizing the revised risk approach in monitoring market risk, measuring asset class drawdowns and evidence of mean reversion, quantifying changing correlations between asset classes, and estimating Plan and asset class level factors. The Chair complimented the work of the Risk Team and asked how Staff would use the information garnered from risk modelling as actionable intelligence. Mr. Berg stated that, with these new tools for evaluating risk, Staff will be able to understand risk in real-time and diagnose problems instead of waiting for information from investment managers.

IV. REVIEW OF ASSET ALLOCATION

The Chair then introduced Mr. Frank Benham, Managing Principal and Director of Research for Meketa Investment Group ("Meketa"), to provide a presentation on asset allocation. Mr. Benham began his presentation by stating that the focus of the presentation is to provide portfolio options for the Plan. Mr. Allen Gillespie thanked Mr. Benham and Meketa for taking the time to contact each Commissioner to walk through the asset allocation process and seek input.

Mr. Benham reviewed the proposed asset allocation policies. He explained that following the December Commission meeting, Staff and Meketa had discussed numerous policy options and went through multiple iterations for implementation of several of the options. He stated that Meketa recently completed its 2018 Asset Study, which resulted in marginal changes to the projected return expectations of the asset mixes discussed in the December Commission meeting. He explained that Meketa had included three alternative policies with return expectations of 7.4 percent, 7.5 percent, and 7.6 percent.

Mr. Peter Woolley, Managing Principal and Co-Chief Executive Officer for Meketa, discussed the recent asset-liability analysis. Mr. Woolley pointed out that the three policy recommendations are all very similar to the current Plan, but with modest modifications. Mr. Woolley discussed the historical scenarios analysis, stress tests that looked at the impact of different stress periods on funded status, and a sequence of returns analysis. A lengthy discussion ensued regarding the proposed asset allocation policies.

Next Mr. Woolley discussed specific attributes of Meketa's three proposed policy mixes. Of the three allocations, Policy X is the most conservative, meaning it is likely to perform the best in a crisis but will likely trail the others in a strong equity market. Policy Z is the most aggressive, suggesting it is expected to produce the highest expected return in the long run but will suffer slightly larger drawdowns in a crisis. Lastly, Policy Y falls between Policies X and Z, with an expected return of 7.5 percent, which is higher than the current policy, with a similar level of risk.

Mr. Woolley stated that no matter which policy the Commission chooses, equities represent the largest share of the portfolio's volatility (risk). In addition, each policy has approximately 60 percent allocated to assets with daily or monthly liquidity. He explained that Meketa conducted an extreme stress test to analyze the Plan's liquidity. Mr. Benham stated that even under extreme scenarios, their analysis indicated that the Plan would maintain sufficient liquidity to meet its obligations.

Break was taken from 11:51 a.m. to 12:05 p.m.

Upon returning from break, Mr. Hitchcock introduced Mr. Josh Restauri, who joined the analyst trainee program. Mr. Restauri went to Indiana University of Pennsylvania. He was an intern at Stewart Capital prior to coming to RSIC.

The Chair inquired as to Mr. Berg's thoughts on Meketa's recommendation and asset allocation policies. Mr. Berg stated that his personal preference for the Plan is Policy Y. He stated that he likes the reduction in credit exposure and the modest addition to equity. Mr. Berg also stated that he prefers Policy Y over the Plan's current policy. Mr. Condon raised a guestion regarding the Commissioners' fiduciary duty and how that impacts the adoption of a particular asset allocation. Specifically, he raised the question of what their fiduciary obligations are when the proposed asset allocation reflects a 50 percent probability of making seven and a guarter percent annual return. He and Mr. Hitchcock discussed the statutory rate of return and its impact on asset allocation decisions by the Commission. Mr. Hitchcock explained that the Commission historically has used the statutory rate of return to inform the Commission's decision on how to allocate the assets. The assumed rate of return is considered by the Commission as it manages the Plan and contemplates various asset allocation models. He noted that it would be incumbent upon the Commission to inform the General Assembly and other interested parties if the Commission determined that it would not be prudent to take on the level of risk required to attempt to meet the assumed rate of return. Staff feels that the current proposed asset allocation, with a 52 percent probability of making the assumed rate of return, represents a prudent path to work toward the seven and a quarter percent return, while maintaining a prudent level of risk. A lengthy discussion ensued regarding Policy Y and related matters.

Mr. Gillespie moved that the Commission adopt the recommendation of Meketa and the CIO to approve the asset allocation as presented on red number page 48 of the Asset Allocation Report from Meketa dated February 8, 2018 in the open session agenda materials, Asset Allocation Y, effective July 1, 2018; directs that the approved allocation be incorporated into, and made a part of, the Statement of Investment Objective and Policies; and authorizes Staff to finalize the asset allocation by making any technical revisions or formatting edits consistent with the action taken by the Commission. Mr. Giobbe seconded the motion, which passed unanimously.

V. EXECUTIVE SESSION

Dr. Wilder made a motion that the Commission recede into Executive Session to discuss investment matters pursuant to S.C. Code Ann. § 9-16-80 and § 9-16-320; to receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2) related to litigation filed by American Timberlands Fund II, LP; and to receive advice from legal counsel pursuant to S.C. Code Section 30-4-70(a)(2). Mr. Hancock seconded the motion, which passed unanimously.

VI. POTENTIAL ACTION RESULTING FROM EXECUTIVE SESSION

Upon return to open session at 1:45 p.m., Mr. Hitchcock noted the Commission did not take any reportable action while in executive session. Any action that did occur while in executive session will be publicized when doing so would not jeopardize the Commission's ability to achieve its investment objectives or implement a portion of the annual investment plan.

VII. ADJOURNMENT

There being no further business, upon a motion made by Mr. Gillespie and seconded by Mr. Giobbe, the Commission voted unanimously to adjourn. The meeting adjourned at 1:50 p.m.

[Staff Note: In compliance with S.C. Code Ann. Section 30-4-80, public notice of and the agenda for this meeting were delivered to the press and to parties who requested notice and were posted at the entrance, in the lobbies and near the 15th Floor Presentation Center at 1201 Main Street, Columbia, S.C., at 4:59 p.m. on February 5, 2018.]