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December 4, 2007

Dr. Russell Read
Chief Investment Officer
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400 P Street, Suite 3492
Sacramento, CA 95814

Re: Inflation-Linked Asset Class Policies (Policy Agenda Item 3a)

Dear Russell,

You requested Wilshire's opinion regarding the four proposed or modified policies for the new Inflation-Linked Asset Class, including the overall asset class policy and the policies for commodities, inflation-linked bonds, and forestland. We understand that the policy for infrastructure is still under development, and therefore additional investments in the infrastructure sub-asset class are still restricted until the policy is subsequently approved.

These policies were originally intended to be included on the agenda for the October meeting of the Policy Sub-Committee, but we had extensive comments on each at the time and they were subsequently removed from the agenda. We have noted below the changes/clarifications we requested at that time, whether or not we believe that Staff has sufficiently responded to our objections, and any new issues we may have.

At this time, we recommend approval of all four policies, subject to clarification on the issues we raise below with each of the proposed policies.

Overall Policy

At the September 2007 Investment Committee meeting, Wilshire stated that it was imperative that policies, a clear outline of individual responsibilities, a framework for investment decision-making (including Staff's delegated authority), and incentive compensation all be in place before any additional investments should be made in this new asset class.

Since this agenda item is for the Investment Policy Subcommittee it reflects only the proposed policy including the basic structure of the total program, the structure of the underlying sub-asset classes, and the benchmarks for both the sub-asset classes and the overall program. The agenda item does not contain any information regarding what

authority is vested in the SIO for Asset Allocation versus the CIO (delegated authority is granted through the Investment Committee), or on what basis will individual investment decisions or allocations among the four sub-asset classes be made. Therefore, we believe that this document satisfies (with the exception of infrastructure, which is still a work in progress) one of the four requirements, above, but still leaves Staff with additional work to accomplish before new assets may be funded. Our understanding from Staff is that a clear outline of the decision-making structure, including Staff's proposal for delegated authority, will be presented to the Investment Committee at a subsequent date.

We do note that the ranges for each of the sub-asset classes have been expanded since the presentation at the September Investment Committee meeting, consistent with the direction given by the Investment Committee at that time.

Commodities

The original policy document for the Commodities sub-asset class was previously presented at the December 2006 Policy Subcommittee meeting and subsequently approved by the Investment Committee as a pilot program. As a result, we will comment in this letter on the aspects of the program which Staff proposes changing since that time.

First, we support the shift to the Goldman Sachs Commodities Index – Total Return from the existing benchmark, which involved the GSCI – Excess Return Index plus some additional factors. The GSCI-TR benchmark is a simpler comparison and presents a clearer picture of the success or failure of the program. In addition, as discussed in the next paragraph, the use of this benchmark encourages investing in a collateral pool comprised mainly of near-cash securities, since the return on these is assumed in the benchmark calculation, and does not support significant investment of the collateral in inflation-linked securities, which has been discussed with Staff on several occasions.

Second, both Wilshire and the SIO for Fixed Income have repeatedly stated their concerns about using inflation-linked bonds instead of cash or near-cash securities for the collateral for this program. We agree with the concept that Staff will use inflation-linked securities as collateral only on an opportunistic basis. Such instruments add the additional risk of inflation-linked-duration (i.e., duration risk as a result in changes in the underlying assumptions regarding future inflation) and can meaningfully add or detract from Staff's ability to add value in the management of commodities. Given the significant range granted to each sub-asset class by the Investment Committee, we believe that Staff has sufficient ability to over- or under-weight commodities or inflation-linked securities as they see fit, without needing to "muddy the waters" and pool the returns of these disparate investment types into a single sub-asset class. As a result, this change shifts the movement by Staff toward a more limited use of such securities in the collateral pool.

Inflation-Linked Bonds

As this policy is new, this is Wilshire's first opportunity to publicly comment on it. We have no objections to the policy as proposed, including the ranges suggested for each type of inflation-linked bond or the use of derivatives in lieu of cash securities, as long as such derivatives are purchased for the purpose of reducing transactions costs, market impact, or demonstrate some other superiority to cash securities and are not purchased for the purpose of increasing total leverage in the portfolio. The use of derivatives in this program, as in any program, is governed by the derivatives policies and guidelines already in place within CalPERS. Furthermore, we support the stated limitation of portfolio duration to no more than one year greater or lesser than the composite benchmark in order to mitigate unwanted risks in this portfolio.

We compared this policy to the current policy for TIPS, and found two main differences. First, the TIPS portfolio is restricted to only US bonds, while this policy allows for non-US government inflation-linked bonds. We support this change in the interest of expanding the opportunity set of investments. Second, the TIPS policy has a duration restriction of +/- 10% of index duration, while this policy has a limit of +/- one year. This policy's limit is slightly broader than the TIPS policy, but does not add excessive risk.

Forestland

The original policy document for the Forestland (previously, "Timberland") sub-asset class was previously presented at the September 2004 Policy Subcommittee meeting and subsequently approved by the Investment Committee. As a result, we will comment in this letter on the aspects of the program which Staff proposes changing since that time.

The first change in the policy we note is the alteration in the benchmarks. Staff has proposed reducing the overall return hurdle from CPI + 6% to CPI + 5%. We do not explicitly object to this change, but we think that it does merit some discussion with the Policy Sub-Ccommittee. Staff has explained to us that current investment opportunities available do not meet the CPI + 6% hurdle, and therefore Staff has elected to reduce the benchmark. We believe that this may be a case of the "cart leading the horse", where CalPERS might be better served by keeping the return requirement higher and waiting for appropriate investment opportunities that meet the return requirements than by lowering the return requirements to allow for more investment opportunities. While we do not necessarily object to the new hurdle as it still achieves the long-term goal of the Inflation-Linked Asset Class, perhaps, instead of reducing the benchmark, Staff should request an expansion of the range for Forestland to allow for a minimum investment of 0% in this asset. If the benchmark contained in the current policy is still valid, and we note that the Investment Committee did approve CPI + 6% as a reasonable benchmark for CalPERS' former Timberland program for some time, then it stands to reason that waiting for

superior investments is a better use of CalPERS' capital than reducing the benchmark to allow for investments that wouldn't have qualified previously.

However, if the Policy Sub-Committee agrees with Staff's contention that Timber investments in this new asset class should be geared toward the slightly lower benchmark of CPI + 5% in order to generate a more consistent rate of return, then approval is warranted.

We do recognize that since the purpose of this sub-asset class is to exceed inflation plus a premium, and not to compete with other real estate investments, the elimination of the Timber Index as a benchmark is appropriate. The CIO has also expressed interest in using this sub-asset class to generate returns through a variety of ways (including carbon sequestration credits, energy generation, etc.) that may not be clearly linked to a traditional Timber benchmark which simply measures growth in the value of the land and lumber potential. However, given that the selection of actual parcels of Forestland from the opportunity set available in the marketplace still can be used as a meaningful measure of success, we recommend that this benchmark be revisited in the future as the CIO expands the breadth of incentive compensation to include inflation-linked, peer-linked, market-linked, and actuarial growth-linked measures. While we recognize that the market index may not be appropriate in an inflation-linked context as the primary benchmark, it may play some role in evaluating Staff's success in picking superior investments.

Wilshire is in support of the addition of Section V.B – Non-Conventional Forestland Investments, as we are generally in support of any effort to broaden the opportunity set of any asset class. This section does not require Staff to invest in non-conventional assets, but only to pursue such investments when the returns to CalPERS are expected to be superior to conventional assets.

We also support the removal of several sections that detailed geographic diversity, species diversity, and end-product diversity (revenue source). The target for this sub-asset class at the current time is 0.25% of the total portfolio. At this size, we believe it is impractical to impose such onerous restrictions on the investment of this portfolio as this extra level of diversification lends little risk reduction to the total portfolio. However, were the Inflation-Linked Asset Class to eventually consume a far larger fraction of CalPERS' assets, and were Forestland to become a much larger share of such an asset class, revisiting these risk controls may be warranted.

We believe that Section V.C.5 – Leverage requires further clarification. The version presented to us in October stated "The Portfolio shall be permitted to employ leverage up to a maximum of 40% loan-to-value. Subject to approval by the SIO Real Estate the Portfolio may use up to 50% leverage… provided leverage (is) reduced to 40% within 3 years." At the time, we believed that, as written, this rendered the 40% leverage cap meaningless. We interpreted this statement to mean that if the SIO is allowed to approve

a “temporary” 50% leverage cap, he could maintain that 50% leverage ratio for three years, briefly reduce it to 40%, and then re-increase it to 50% for another three years. We recommended that either the cap be increased to 50% across the board or that the policy be changed to state that any leverage in excess of 40% require CIO or Investment Committee approval.

In the current version of the policy Staff has proposed for the December meeting, however, we still believe that more clarification may be valuable. Now, as written, the SIO has the ability to exceed the leverage cap without CIO approval, as long as the leverage comes back down within one year. This still technically allows for the SIO to exceed the leverage cap without authorization for up to one year, bring leverage back down briefly, and then increase it again without authorization for another year, ad infinitim. We still believe that this language needs to be tightened to either require the SIO to work more expeditiously to reduce leverage, or to be required to provide a compliance violation report to the Investment Committee on a monthly basis until the leverage is back within bounds.

In the October version, Section V.D – Asset Allocation stated that Staff had three years to reduce the allocation to Forestland should it exceed the range stated in the overarching Inflation-Linked Asset Class policy. We informed Staff at that time that a three year remedy period is excessive, and should be reduced to one year or less. The maximum of the allocation range is currently three times the target to allow Staff some flexibility, but this leeway should not be interpreted to give Staff multi-year flexibility to exceed the guidelines imposed by the Investment Committee.

Staff responded by adding language that now requires it to correct an allocation violation within one year, or still three with CIO approval. As with the language regarding leverage, above, we believe that this is excessive. Although the Staff’s delegated authority has yet to be finalized for this asset class, and may provide some of the missing information on these points, in our opinion, three year correction periods are excessive, with or without CIO approval. The Investment Committee has accepted each of the various allocation ranges proposed by Staff, and Staff should live by what they proposed. Violations of these ranges should require a monthly report to the Investment Committee as to the reason why an investment exceeds the allocation range and how Staff is working to correct that violation. While we recognize that this is an illiquid asset class and investments cannot be bought or sold as easily as public securities, a three year cure period renders the guidelines meaningless. In our opinion, Staff should invest in-line with the guidelines as written, and should only exceed these guidelines with CIO approval in extraordinary circumstances, not as an intentional part of the investment process.

Conclusion

In summary, while we support the continued development of this new asset class, we believe that there are a number of areas that still require clarification. Although we support allowing Staff as much flexibility in the management of these assets as is reasonable, in some cases we differ from the proposals over the definition of what is "reasonable". We do not agree with Staff that the ranges and leverage limits proposed by Staff and accepted by the Investment Committee should function as no more than optional guidelines that may be violated with CIO approval as Staff sees fit. If Staff wishes to increase the leverage in the portfolio or the ranges for sub-asset classes, Staff should present the reasons why such changes are in CalPERS' interest and should seek the Investment Committee's explicit approval for such changes, rather than simply exceed these caps subject only to three-year cure periods.

We look forward to discussing these issues with you and / or the Policy Subcommittee over the next few weeks.

Sincerely,