Questions for RFP No. NM INV-003-FY17 (Passive Currency Hedging)

1. Do Pension Plans of US Public and Corporate Entities for employees located outside of the US qualify to be included in bullet point 4.b. of PART III. B. List of Minimum Qualifications? Yes

2. The Scope of Work noted on page 3 says that "services must be primarily focused on developed equity markets". Would NM PERS consider a mandate which would not hedge (i.e. short) emerging market currencies but would have long exposure to emerging market currencies selectively to add value (funded perhaps by short positions in developed market currencies)? No mandate for emerging markets will be explored at this time.

3. Would the mandate allow for cross-hedging (i.e. out-of-benchmark) positions? No, this is envisioned as a passive hedging program and hence out of benchmark positions would not be permitted.

4. We typically tailor our volatility and return targets to the requirements of the individual client, which in turn informs the applicable fee structure. To enable our preparation of a tailored fee quote, are you able to advise upon your preferred volatility and return targets or permissible range? The strategic goal of the hedging program is to reduce the developed equity program volatility by 10-15%. Given that it is a passive mandate, no incremental return is anticipated.

5. Question Subject Matter: Appendix D (Fee Proposal Form), page 1, second section "Performance Based Fee Calculation," and third section "Proposed Performance Based Fee."

   In the Summary of Solicitation, it states NM PERA is seeking passive currency hedging services. Appendix D requests a proposed performance based fee, and we note that we have seen performance based fees most often pertain to active currency hedging services.

   It would be helpful if PERA or Wilshire could confirm if they are solely seeking a passive currency hedge service, or would it also be appropriate to include in our response additional information about an active (dynamic) currency hedge service. We will consider only passive currency hedging at this time.

6. RE: Minimum Qualification (4.d), found on Page 4: <u>Part III. Minimum Qualifications</u>

   As of the date the Offeror's proposal is submitted, the Offeror must provide a currency hedging composite that is compliant with the CFA Institute's Global Investment Performance Standards (GIPS) and compares 50% hedged results with unhedged equity index performance.

   Would a single account composite track record for a 50% USD hedged developed equity mandate that switched to 75% in March 2015 satisfy this Minimum Qualification? Yes.

7. The following question relates to Appendix C (Questionnaire), Section D (Product), Question 8, which appears on the 5th page of Appendix C, or page 25 of the combined PDF document):

   We can provide a live hedging track record for a 50% hedged multi-currency equity portfolio stretching over 10 years, but it is for a different currency based investor. Our current USD-base passive hedging track records are of shorter length and are not based on the MSCI ACWI ex-US benchmark. However, we feel that using a longer-period simulated USD-base track record, with all relevant effects (rebalancing, costs, etc.) as in a live program, and based on the MSCI ACWI ex-US benchmark index would provide a much more meaningful comparison for Public Employees Retirement Association of New Mexico. Please could you confirm whether, in this case, submitting both the theoretical track record and live track record but for another base and equity portfolio composition would be acceptable? Can this information be sent to you directly as we are aware that the Wilshire Compass database might not be able to accept a theoretical track record? This would be acceptable.

8. In Part II. Scope of Work, it is mentioned that the 'proposed investment strategy benchmark is the MSCI ACWI-ex US IMI' (which contains both developed and emerging market currency exposures). This section also mentions, 'target mandate size for such services is 50% of developed market currencies'. Is it therefore correct in assuming that the portfolio's emerging market currency exposure will not be hedged? Yes, this is a correct assumption.

9. A number of the questions that appear in Appendix C Questionnaire to the NM Pera RFP are questions that would normally be asked of active, rather than passive currency managers. As a manager of both active and passive programme we can answer them from an active perspective, but, would like confirmation that this is appropriate. Example questions are below:
   a. Are carry trades or net short positions considered and if so, how are they incorporated into the strategy?
   b. Provide a brief description of the underlying factors used to model return expectations along with the forecasting techniques used to process the data.
   c. What analysis and models do you use to evaluate currencies?
   d. What time horizon do you typically use when determining the attractiveness of a currency? Why do you feel this time horizon is optimal?
   e. In what market environments would you expect your approach to outperform or underperform?

      The mandate for this RFP is for a passive program only. For those questions that are more appropriate for an active program, please answer N/A unless you feel it would provide further insight into the firm's currency expertise.

10. In conjunction with the completion of this RFP we will be detailing the product on the Wilshire Compass database. However, we would like an indication of how returns should be provided. Specifically, we manage currency overlay programmes for a variety of clients with a

variety of underlying holdings. Passive portfolio returns are very portfolio specific and not representative of the returns a US investor with a passive hedge on an international equity portfolio would achieve. Should we therefore leave the returns section blank? Alternatively, what should we represent? The submitted returns should be based on the representative performance of a US based investor in the MSCI ACWI-ex US IMI index with 50% of the developed market currency exposure hedged.

11. Part D, page 24, 2: How many currencies are typically hedged in this approach for determining individual currency weightings?

    a. If we assume a passive currency hedging overlay mandate, aren't the individual currency weightings determined/given by PERA's/the benchmark's allocation, rather than us as overlay manager? Yes

12. Part D, page 24, 5: Do you utilize cross-hedging?
    a. What do you define as cross-hedging? I.e., using proxy currencies? Yes, utilizing correlated currencies as an indirect hedge.

13. Part D, page 24, 6: Are carry trades or net short positions considered and if so, how are they incorporated into the strategy?
    a. Could you please clarify what you understand by net short positions? Net short positions would entail hedging more than 100% of the currency exposure. This would not be applicable to this passive mandate.

14. Part D, page 25, 10: In what market environments would you expect your approach to outperform or underperform?
    a. If we are supposed to perform a passive currency overlay mandate there should not be any out- or underperformance, as we stick to the benchmark? Correct, the intent of the question is to get the fullest picture possible of the firm's currency expertise.

15. Part E, page 25, 2: Describe your process for currency valuation.
    a. If we are supposed to perform a passive currency overlay mandate is such a currency valuation process relevant? In case currency valuation is defined as attractiveness of a currency (ie in terms of PPP, macro and other factors) we do this for active currency overlays. Correct, the intent of the question is to get the fullest picture possible of the firm's currency expertise.

16. Part E, page 26, 9: Provide a brief description of the underlying factors used to model return expectations along with the forecasting techniques used to process the data.
    a. If we are supposed to perform a passive currency overlay mandate is such a process relevant? Correct, the intent of the question is to get the fullest picture possible of the firm's currency expertise.

17. Part H, page 27, 3: Please elaborate on the benchmark-relative returns for this approach over the last three years. Describe any periods of exceptionally strong or weak returns and any reasons for exceptionally high or low volatility.
    a. In case of passive currency overlay using the MSCI ACWI-ex US IMI as benchmark with fix hedge ratio there shouldn't be any exceptionally strong or weak returns versus benchmark? Seems to apply more to an active overlay mandate. Correct, the intent of the question is to get the fullest picture possible of the firm's currency expertise.

18. Part II (Scope of Work), Section A, Page 3: The Currency Management Team has developed and actively manage a dynamic hedging strategy called the Dynamic Ideal Hedge Ratio. This strategy has been designed as a currency risk management tool that aims to improve the efficiency (risk-adjusted returns) of multi-currency portfolios. We believe that this solution would address your currency management objectives. However, given that your RFP is for passive hedging, would you accept a dynamic hedging solution? If so, what would be the tracking error limits around the proposed benchmark?" At this point, a purely passive approach is preferred.

19. Part E, Question 7 – What is the frequency of the hedge, can the periodicity change, and if so, based on what criteria?
    a. Please define frequency of the hedge. Is this relative to the tenor of the hedge or review of the hedge? Relative to review of the hedge, please confirm that valuations are available monthly. The tenor or time period of the hedge.

20. General– Does the scope of this hedging service encompass both segregated and pooled funds? Because we do not have the data to include currency of the underlying investments within the pooled funds, the scope of this hedging service will be for the segregated funds only.

21. Part II (Page 3, paragraph 1), A. Description of Services Sought: For the proposed mandate, are Passive Currency Hedging Services defined as managing the risk associated with PERA's developed equity market currency exposures passively (i.e., within a narrow exposure range (e.g., +/-5%) relative to the designated benchmark) or actively (i.e., within a broader exposure range (e.g., 0%-100%) relative to the designated benchmark)? Any additional information on the proposed mandate objectives and permitted currency exposure range would be appreciated. The former rather than the latter.

22. Part III (Page 4, item 4.d.), B. List of Minimum Qualifications: For purposes of the Minimum Qualifications (Section B., item 4. d.) and the currency hedging composite that is compliant with the CFA Institute's Global Investment Performance Standards (GIPS), can the 50% hedged results represent a separate hedging overlay based on unhedged developed equity market currency exposures or does the composite have to include both the hedging overlay and the underlying unhedged developed equity market index performance results in combination? As a global

currency specialist, we provide currency hedging services in overlay form based on a specific reference to clients' underlying international asset exposures managed by a third party manager. The composite should include the impact of both the underlying unhedged market performance and the impact of the 50% currency hedge.

23. Question Part E.7 asks: What is the frequency of the hedge, can the periodicity change, and if so, based on what criteria?
    a. We are seeking clarify on what is meant by "frequency of the hedge." Are you asking how we determine the tenor of the contracts utilized (e.g. 1 month forwards vs 3 month forwards, etc.)? Yes, the length or tenor of the contracts.