

**Mail Stop 6010**  
Via Facsimile and U.S. Mail

April 20, 2006

Mr. Andrew A. Barnard  
President and Chief Executive Officer  
Odyssey Re Holdings Corp.  
300 First Stamford Place  
Stamford, Connecticut 06902

**Re: Odyssey Re Holdings Corp.**  
**Form 10-K for fiscal year ended December 31, 2004**  
**File No. 1-16535**

Dear Mr. Barnard:

We have reviewed your March 15, 2006 response to our March 2, 2006 letter and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for fiscal year ended December 31, 2004

Management's Discussion and Analysis

Revenues and Expenses, page 45 -47

1. Please refer to prior comment one. We note that your proposed new disclosure includes a quantification of the aggregate impact of changes in "actual results" on pre-tax income in 2004. While unclear in your presentation, "actual results" appears to represent 1% of the net unpaid losses and LAE at December 31, 2004. Please expand your proposed disclosure to explain this terminology and quantify the variability in "actual results" that you expect to be reasonable likely to occur over time.

2. Please refer to prior comment one. You provide a new sensitivity measure, frequency and severity of outstanding claim reserves. However, the usefulness of this sensitivity measure is limited because you do not quantify the actual variation in claim frequency and severity that has occurred historically and do not discuss the likelihood that similar changes may occur in the future. Please expand your proposed disclosure to provide this information. Also, your proposed new disclosure appears to indicate that frequency and severity fluctuations move in tandem. Please expand your proposed disclosure to explain the underlying assumptions for claim frequency and claim severity as reflected in you proposed sensitivity measure and the correlation between these separate assumptions and your actual historical experience. Provide a more direct linkage between your discussions of historical loss emergence patterns, related provisions for uncertainty contained in your reserves at December 31, 2004 and the reasonably likely sensitivity of your reserve estimate to future variations from assumed claim frequency and severity.
3. Please refer to prior comment two. Your proposed new disclosure was unclear or did not address all of our concerns. Please provide the following information in disclosure-type format.
  - Describe the methods and assumptions used to determine or validate your case reserves, including the factors typically considered in establishing an ACR reserve.
  - Describe the methods and assumptions for your IBNR reserves. Clarify the relationship between your calculation of ultimate losses, paid claims, case reserves and the IBNR reserve.
  - You project ultimate losses to establish claims emergence for future periods, based on historical paid and case reserve loss emergence patterns and insurance and reinsurance pricing trends. Provide a more detailed description and quantification of these trends and the related assumptions in your projection of ultimate losses.
  - Describe the “qualitative reassessments” that you make when emerging trends are not reflected in past experience and quantify the related impact on your operating results for each period presented.
  - Describe the expected impact of these trends on future operating results.
4. Please refer to prior comment three. We note that you do not explain why recognition was not required in earlier periods or why you made prior year adjustments in successive periods to the same book of business. Please provide this information in disclosure type format. Link this disclosure to your discussion of the accuracy and completeness of information received from cedants.

5. Please refer to prior comment four. You appear to rely on ceding companies to provide virtually all critical data used in the reserve calculations, such as premium information for recent treaty years and loss payment information for later treaty years. Also, you state that your reserve methodologies are dependant on the nature and quality of data collected from ceding companies. Please expand your proposed disclosure to discuss in greater detail your process for determining the accuracy and completeness of information received from cedants. Clarify the extent to which your estimates of ultimate loss for more mature treaty years and development of trend data are based on internally generated data or data provided by cedants. For each period presented, quantify and explain the basis for the internal estimates you used to adjust premiums and claims reported by cedants.

Results of Operations, page 47

6. Please refer to prior comment five. We note that your proposed new disclosure omits quantification of the financial objectives of your retrocessional program (e.g. accumulation risk) and changes in related terms (e.g. retention, level of capacity purchased and geographic scope) that have affected loss and loss adjustment expenses. Please provide this information in disclosure type format for each period presented. Discuss how you expect reinsurance pricing trends to affect the future structure of these arrangements, volume of capacity purchased and operating results.
7. Please refer to prior comment six. We note your statement that the “maximum coverage available will increase or decrease as premium adjustments applicable to a particular coverage period are recognized.” These adjustments appear to result from changes in your estimate of premium reported by cedants. Please quantify the impact of such changes in estimate on operating results for each period presented. Also, you state that additional premiums are due if additional losses are ceded subject to a maximum amount. These additional ceded premiums appear to be in excess of ceded earned premium as described on page 16 of your response letter. Please expand your description of the contractual terms governing your obligation to pay such additional ceded premiums.
8. Please refer to prior comment six. We note that the remaining aggregate limits for treaty years 1996 through 2000 are either insignificant or zero. Please discuss the absence of remaining aggregate limits for these treaty years and your ability to reinsure loss experience that is expected to emerge in future periods. Quantify the expected impact on your operating results.

Liquidity and Capital Resources, page 53

9. Please refer to prior comment seven. Your proposed new disclosure for reinsurance recoverable related to unpaid balances, which accounts for 92.4% of this asset, is inadequate. Please provide more specific discussion of the primary factors affecting when these amounts become due and the timing and certainty of collections, distinguishing between the top 10 and all other reinsurers. Quantify amounts and describe related future time periods when you expect to collect reinsurance recoverable related to unpaid balances.

Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies, page 69

10. Please refer to prior comment eight. You disclose that assumed premiums are earned over the terms of the related insurance policies and reinsurance contracts and certificates and include premium estimates for amounts due but not rendered by the ceding company. We note that you appear to record reinsurance balances receivable based on estimated ultimate premium, actual accounts rendered by the ceding company and your own collection experience. These premium estimates are subsequently revised based on actual results. Please provide us the following information in disclosure-type format consistent with guidance for critical accounting estimates required to be included in MD&A:
- Describe the assumptions used to estimate ultimate premium, acquisition costs, reinsurance balances receivable and the unearned premium reserve for each period presented
  - Explain and quantify the sensitivity of such previously recorded estimates to changes in these assumptions.
  - Explain the underlying factors for adjustments to such previously recorded estimates and quantify the impact on operating results for each period presented.

Mr. Andrew A. Barnard  
Odyssey Re Holdings Corp.  
April 20, 2006  
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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Your letter should key your responses to our comments. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

You may contact Frank Wyman, Staff Accountant, at 202-551-3660 or Kevin Woody, Accounting Branch Chief, at 202-551-3629, if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg  
Senior Assistant Chief Accountant