

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

Mail Stop 3720

November 16, 2006

Via U.S. Mail and Fax (212) 333-8544

Ms. Debra Ziola Chief Financial Officer Glenayre Technologies Inc. 825 8th Avenue, 23rd Floor New York, NY 10019

RE: Glenayre Technologies Inc.

Form 10-K for the fiscal year ended December 31, 2005

Filed March 16, 2006

Form 10-Q for the Quarter Ended September 30, 2006

Filed November 8, 2006

File No. 0-15761

Dear Ms. Ziola:

We have reviewed your filings and have the following comments. We have limited our review to your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Ms. Debra Ziola Glenayre Technologies Inc. November 16, 2006 Page 2

Form 10-K for the Year Ended December 31, 2005

Report of Independent Registered Public Accounting Firm, page 35

1. We note on pages 35 and 85 that your auditors expressed an adverse opinion on the effectiveness of your internal controls over financial reporting with respect to your revenue recognition for contracts with multiple element arrangements. It appears to us that the errors were confined to the fourth quarter. If so, tell us the nature of the errors, how they occurred, and how you concluded that prior periods, including the first three quarters of fiscal 2005, were not materially impacted. If not, tell us why previously issued financial statements were not restated.

Consolidated Statements of Cash Flows, page 39

2. Please refer to the line item captioned "Asset and share purchase of EDC, net of cash acquired" for \$66.2 million. On page 40, you disclosed that you paid \$81.6 million cash at closing. We are unable to determine from your disclosures elsewhere in the filing what amounts comprised "net of cash acquired." Please advise.

2. Acquisition of EDC, page 42

3. Please clarify your disclosure on the pension plan and other employee-related obligations that you assumed in connection with EDC's German operations. Tell us what you mean by the statement that "Amounts not paid or received in future periods for these assumed liabilities and receivables, with the exception of the pension obligation, will be adjusted through the seller receivable." In this regard, tell us how these obligations will be funded in the future and if Universal has any future funding commitment.

3. Summary of Significant Accounting Policies

Inventories, page 45

- 4. Please refer to the first paragraph herein. Provide us with more details of your accounting for inventory at the EDC division, particularly your inventory pass-through reimbursement arrangements with Universal.
- 5. Describe in detail how you generate revenues from EDC's arrangement with Universal.

Ms. Debra Ziola Glenayre Technologies Inc. November 16, 2006 Page 3

Form 10-Q for the Quarter Ended September 30, 2006

Management's Discussion and Analysis of Financial Condition and Results of Operations

EDC, page 34

6. We note that Messaging's revenues declined by 27%, due primarily to the loss of a major customer (Sprint Nextel). Tell us if an impairment condition has occurred and whether you have tested Messaging's long-lived assets for recoverability. Refer to paragraph 8 of SFAS 144.

14. Commitments and Contingencies, page 24

7. We note that you have conducted an internal investigation of the stock option backdating allegation. Please be aware of your responsibility to file a Form 8-K Item 4.02, should you conclude that your investors can no longer rely on your previously issued financial statements.

* * * *

As appropriate, please amend your filings and respond to these comments through correspondence over EDGAR within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and

Ms. Debra Ziola Glenayre Technologies Inc. November 16, 2006 Page 4

• the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Kathryn Jacobson, Staff Accountant, at (202) 551-3365 or Kyle Moffatt, Accountant Branch Chief, at (202) 551-3836 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Larry Spirgel Assistant Director