



DIVISION OF  
CORPORATION FINANCE

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

September 23, 2010

Anthony S. Loumidis  
Chief Financial Officer  
American DG Energy Inc.  
45 First Avenue  
Waltham, MA 02451

**Re: American DG Energy Inc.  
Item 4.01 Form 8-K  
Filed September 21, 2010  
File No. 1-34493**

Dear Mr. Loumidis:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within five business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Item 4.01 Form 8-K Filed September 21, 2010

1. We note your reference to GlenRose Instruments, Inc. as the Registrant. Please revise.
2. Please disclose the actual date that Caturano resigned. Refer to paragraph (a)(1)(i) of Item 304 of Regulation S-K.
3. We note your disclosure of a material weakness in your internal control over financial reporting that is a reportable event. Please disclose whether (i) a committee of the board of directors, or the board of directors, discussed the subject matter of each reportable event with Caturano and (ii) whether you authorized Caturano to respond fully to inquiries of the successor accountant concerning the subject matter of each reportable event and, if not, describe the nature of any limitation thereon and the reason therefore. Refer to paragraphs (a)(1)(iv) and (v) of Item 304 of Regulation S-K.

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4. Please file an updated letter from Caturano and Company, Inc. as an exhibit to the amendment filed in response to our comments in accordance with Items 304(a)(3) and 601(b)(16) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

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

You may contact Lisa Sellars at 202-551-3348 if you have questions. In her absence you may contact me at (202) 551-3344.

Sincerely,

William H. Thompson  
Accounting Branch Chief