



DIVISION OF  
CORPORATION FINANCE

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

July 1, 2010

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

**Re: American DG Energy, Inc.  
Registration Statement on Form S-3  
Filed June 8, 2010  
File No. 333-167392  
Form 10-K for the Fiscal Year Ended December 31, 2010  
Filed March 31, 2010  
Definitive Proxy Statement on Schedule 14A  
Filed April 30, 2010  
Form 10-Q for the Fiscal Quarter Ended March 31, 2010  
Filed May 13, 2010  
File No. 001-34493**

Dear Mr. Loumidis:

We have limited our review of your registration statement to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. Where 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.

We have also reviewed the above Exchange Act filings 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 the comments directed to your Exchange Act reports within ten business days by amending your filings, 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 amendments to your filings and the information you provide in response to these comments, we may have additional comments

Registration Statement on Form S-3

Incorporation of Documents by Reference, page 11

1. Please incorporate by reference your Form 8-K filed on February 11, 2010. Please see Item 12(a)(2) of Form S-3.

Exhibit 5.1

2. The legal opinion states that the legal opinion is to be used only in connection with the offer and sale of the Common Stock and Warrants while the Registration Statement is in effect. Please confirm that you will file an updated legal opinion as an exhibit to the registration statement pursuant to Rule 462(d) at the time a takedown occurs. Please refer to Securities Act Forms Compliance Disclosure and Interpretations Question 118.02 available at [www.sec.gov](http://www.sec.gov).

Form 10-K for the Fiscal Year Ended December 31, 2010

Cover Page

3. You identify your Commission file number as 0-52294 on your cover page. However, your current Commission file number is 001-34493. Please confirm to us that you will identify the correct Commission file number on your future reports.

Item 1. Business, page 2

General, page 2

4. You state in the final paragraph of page 2 that the data sets from two CHP market analysis reports sponsored by the Energy Information administration “were used to estimate the CHP market potential in the 100kw to 1 MW size range.” Please disclose who created the estimate. If the estimate was part of the reports, please identify the page number that the estimate is found in the reports. If you created the estimate, please briefly discuss how you created the estimate using the data sets from these reports. We also note that these reports were created in 2000. Please discuss the relevance of the data to the current period.
5. In the second to last paragraph in this section you state that “[t]he primary type of equipment used is a natural gas-powered, reciprocating engine provided by Tecogen...” In the first paragraph under “The Role of DG” you state that you use engines produced by General Motors. Please clarify the equipment you use and who provides it to you.

The Role of DG, page 3

6. You include several statements that the U.S. Department of Energy made with respect to distributed generation. Please tell us when and where these statements were made and please provide us a copy of the source documents or the website(s) that includes these statements.

The DG Market Opportunity, page 5

7. You identify the source for Figure 1 on page 6 as “U.S. Energy Information Administration Data [2002]. Please provide us the document you used from the U.S. Energy Information Administration to compile Figure 1. We also note that the data used to create Figure 1 is from 2002. Please discuss the relevance of the data to the current period.

Energy Sales, page 7

8. Please provide further detail regarding how you calculated the savings example that you use in the third full paragraph in this section. For example, please define the “economics of a typical energy service contract.”

Competition, page 9

9. You disclose that you compete with several large utility companies, such as Consolidated Edison in New York City, Long Island Power Authority, among others. Please revise your disclosure to clearly indicate, if true, that the entities that you identify are larger than you in terms of revenues and assets. Also, please disclose the principal methods of competition (e.g., price, service, warranty or product performance) and any positive and negative factors pertaining to your competitive position. Please apply this comment, as applicable, to your entire “Competition” discussion.

Recent Sales of Unregistered Securities, page 15

10. We note that this section covers your sales of unregistered securities during the past two fiscal years. Please include in this section sales of securities within the past three fiscal years that you did not register under the Securities Act. Please refer to Item 701 of Regulation S-K.
11. Please provide greater specificity as to the date in 2008 that the two holders of the company’s 8% convertible debt converted their debentures into shares of your common stock and when the 17 accredited investors exercised 1,010,000 warrants. Please refer to Item 701(a) of Regulation S-K.
12. Please clarify the consideration that you received for the warrant that you issued to Hayden IR on October 1, 2009. If this warrant was issued in exchange for services from Hayden IR, please describe these services.

13. You provide a general statement in the ninth full paragraph in this section that the transactions you disclose were exempt from registration under the Securities Act under Section 4(2) and/or Regulation D. Please revise this section to indicate for each transaction the section of the Securities Act or the rule of the Commission under which exemption from registration is claimed rather than providing a general statement.

Item 7. Management's Discussion and Analysis of Financial Condition...page 17

Critical Accounting Policies, page 19

14. Refer to your discussion of related party transactions. Please reconcile the amount due from related party of \$265,012 to the amount recorded on the balance sheet of \$297,417 as of December 31, 2008.

Property and Equipment and Depreciation and Amortization, page 20

15. We read your disclosure on page 20 which states, "[t]he company receives rebates and incentives from various utility companies which are accounted as a reduction in the book value of the assets." Please explain to us and disclose how the rebate process works. Further, citing for us the appropriate GAAP literature used please explain to us why reducing the book value of the assets is appropriate. Lastly, tell us why the rebates received are recorded as an investing cash inflow on your statements of cash flows.

Results of Operations for the Years ended December 31, 2009...page 21

16. Where you identify intermediate causes of changes in your operating results, also describe the reasons underlying the intermediate causes. For example, you indicate that the decrease in turn-key installation projects revenues from fiscal year 2009 to 2008 was caused by the construction of fewer projects. While this information is beneficial to the reader, you do not explain why demand decreased for your projects. A discussion of the relevant factors and trends that led to the changes in revenues and other statement of operations line items would be beneficial to the reader. In particular, your MD&A should include descriptions and amounts of:
- Matters that are expected to have a material impact on future operations but that have not had an impact in the past;
  - Matters that have had a material impact on reported operations but are not expected to have an impact upon future operations, and;
  - Matters that have had a material impact on past operating results and involve prospective effects.

17. You state on page 21, “[t]he decrease in our core On-Site Utility energy revenues was primarily caused by significantly lower natural gas prices in our existing markets which translated into lower hot water revenue.” Please revise your future disclosure to indicate the change in the amount and price of energy delivered between comparable periods.

Cost of Sales, page 22

18. Where you describe two or more business reasons that contributed to a material change in a financial statement line item between periods, please quantify, where possible, the extent to which each change contributed to the overall change in that line item. For example, you disclose that your cost of sales for your core On-Site Utility business consists of fuel required to operate your energy systems, the cost of maintenance, and minimal communications costs. While this information is helpful, you do not quantify the extent to which income was affected by each of these reasons. Whenever possible, please quantify all line item changes with more than one business reason. See Item 303(a) of Regulation S-K and SEC Release No. 33-8350.

Liquidity and Capital Resources, page 23

19. Please describe your material commitments for capital expenditures as of the end of the fiscal period covered by the report, and indicate the general purpose of such commitments and the anticipated source of funds needed to fulfill such commitments. Please refer to Item 303(a)(2) of Regulation S-K.
20. Please discuss why your accounts payable increased to \$740,474 as of December 31, 2009 from \$270,852 as of December 31, 2008.
21. In the fourth paragraph in this section you state that John N. Hatsopoulos has provided you a five million dollar line of credit pursuant to a revolving line of credit agreement. You also filed as Exhibit 10.24 a letter from American DG Energy to Mr. Hatsopoulos confirming that the \$5 million line of credit from Mr. Hatsopoulos will be used solely in connection with the development of new energy systems, and will not be used for general corporate purposes or for any other purpose. Please tell us where this term is located in the credit agreement or the basis for the restriction. If you have amended the line of credit agreement to include this provision, please confirm that you will file a copy of the amended credit agreement with your next periodic report. Also, please clarify if “development of new energy systems” means developing a new type of energy system or the installation of new energy systems. Finally, please revise your “Liquidity and Capital Resources” section to better describe the circumstances under which you can use the line of credit.

Item 9A(T). Controls and Procedures, page 25

22. You state that your management including your Chief Executive Officer and Chief Financial Officer evaluated your disclosure controls and procedures. However, your principal executive and financial officers only concluded that your disclosure controls and procedures were not effective to enable you to record, process, summarize and report information

required to be included in the reports that you file or submit under the Exchange Act within the time period required. Please also state whether these same officers concluded the controls and procedures were not effective in ensuring that information, required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to its management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Further, please confirm your understanding that your disclosure controls and procedures applies to the accumulation and communication of all information to your management, not just “material information” and the effectiveness of your disclosure controls and procedures is not limited to only when you are preparing your periodic reports. Please confirm to us that you will apply this comment to your future filings.

23. We note that your management determined that your disclosure controls and procedures were not effective. Please disclose the material weakness in your disclosure controls and procedures that led your management to conclude that your disclosure controls and procedures were not effective. Further, please discuss the specific steps that you are taking or have taken to remediate the material weakness or weaknesses. We note that you disclosed the material weaknesses that your management identified in your internal controls over financial reporting, but it is unclear if these are the reasons that your management concluded that your disclosure controls and procedures were also not effective.
24. You state in the final paragraph of this section that your disclosure controls can only provide reasonable, not absolute assurance that the control system’s objectives will be met. Please confirm that your disclosure controls and procedures were designed to provide reasonable assurance of achieving their objectives, if true and please confirm you will apply this comment in future filings, as applicable.
25. Please apply the above comments to your Form 10-Q for the fiscal quarter ended March 31, 2010, as applicable.

Item 14. Exhibits and Financial Statement Schedules, page 28

26. We note that you filed as Exhibit 10.1, 10.2 and 10.3 your governance charters, such as your Audit Committee Charter. We also note that you filed as Exhibit 10.21 a slide show presentation. Please tell us why you elected to file these under Item 601(b)(10) – Material Contracts rather than under Item 601(b)(99) – Additional Exhibits.
27. We note that you incorporated by references several exhibits from other filings. Please confirm that in future filings when you incorporate exhibits by reference from another filing that you will include the exhibit number assigned to the exhibit in the other filing.

Signatures, page 31

28. We note that John N. Hatsopoulos signed the filing on your behalf as your Chief Executive Officer and Principal Executive Officer. Please confirm that John Hatsopoulos also signed

your Form 10-K in his individual capacity as your Principal Executive Officer. Please confirm that you will apply this comment to future filings.

Consolidated Statements of Operations, page F-3

29. Please state separately on the face of your statements of operations revenue from On-Site utility energy revenues and turn-key installation projects. Refer to SAB Topic 13.B.

30. Tell us and disclose what is netted against sales.

Note 2 – Summary of Significant Accounting Policies:, page F-6

Principles of Consolidation and Basis of Presentation:, page F-6

31. We note you consolidate American DG New York, LLC, or (“ADGNY”). Please address the following:

- Tell us how you determined it was appropriate under GAAP to consolidate ADGNY. In this regard, we note you control a 51% legal interest in ADGNY. Refer to FASB ASC 810. Further, explain to us in greater detail the 2009 ownership changes in ADGNY and how they were accounted for. We read your disclosures in footnote 7. In this regard, explain to us why your legal ownership percentage in ADGNY did not change in fiscal 2009 despite the changes in ownership you disclose in footnote 7 and on page F-4.
- Refer to your consolidated statements of stockholders’ equity on page F-4. The \$202,684 is noncontrolling interest income for the year ended December 31, 2009, and accordingly should be labeled as such. For example, in future filings you could label the line item as “net (loss) income.” Please advise.
- Refer to page 23 where you state, “[t]he noncontrolling interest share in the profits in ADGNY was \$202,684 in 2009 compared to \$305,336 for the same period in 2008. The decrease in noncontrolling interest is due to the overall decrease in joint venture volume and profits and due to changes in ownership structure of underlying joint partners. In 2009, the company made a distribution of \$333,704 to the noncontrolling interest partner.” Explain to us and expand your disclosures to determine how you determine the noncontrolling interest share in profits/losses and distributions.

Revenue Recognition, page F-7

32. We note your sales arrangements contain multiple elements. Please revise your disclosure to comply with FASB ASC 605-25-50-1 to 2. Show us what your disclosures will look like.

Note 3 – Property, Plant, and Equipment:, page F-11

33. Tell us and disclose the useful lives of your property, plant and equipment. Further, explain to us and disclose if there have been any revisions in the useful lives of your co-generation units during the fiscal years ended December 31, 2008, and 2009.
34. We read your disclosure on page 17, which states, “[w]e have experienced total net losses since inception of approximately \$12.2 million. For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as our management executes our current business plan.” Please explain to us how you concluded the carrying values of your co-generation assets are recoverable. See FASB ASC 360-10-35-21-e. In this regard, summarize for us your latest impairment test that concluded these assets are recoverable.

Definitive Proxy Statement on Schedule 14A

General

35. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

Director Nomination Process, page 7

36. We note that you consider “diversity” among other factors when evaluating nominees for director. Please describe how you implement this policy, as well as how your Nominating and Governance Committee assesses the effectiveness of the policy.

Board Leadership structure, page 9

37. You state that you “separate the roles of Chief Executive Officer and Chairman of the Board in recognition of the differences between the two roles.” Please discuss the differences you refer to in the two roles and why this leadership structure is appropriate for you given your specific characteristics or circumstances. Please refer to Item 407(h) of Regulation S-K.

Executive Compensation and Other Information, page 12

Executive Officers, page 12

38. Please revise your disclosure regarding your Chief Financial Officer’s business experience to describe his business experience during the past five years including: his principal occupations and employment; the name and principal business of any corporation or other organization in which such occupations and employment were carried on; and whether such corporation or organization is a parent, subsidiary or other affiliate of the registrant. Please refer to Item 402(e) of Regulation S-K. In this regard, we note that your “Certain



Relationships and Related Party Transactions” section discloses that your Chief Financial Officer shares his business time with GlenRose Instruments, Inc. Also, please disclose the approximate amount of your Chief Financial Officer’s business time, expressed as percentage, which he spends on matters for you.

Summary Compensation Table, page 13

39. Please revise footnote three to your table to disclose the amount of time that Mr. Loumidis spends on the affairs of GlenRose Instruments, Inc. and please quantify the amount of salary that GlenRose Instruments reimburses you for Mr. Loumidis’ services.

Employment Contracts and Termination of Employment and Change...page 14

40. Please revise this discussion as it relates to potential payments upon a change-in-control to quantify the estimated payments and benefits that each named executive officer would receive or tell us why you are not required to do so. See Item 402(j)(2) Regulation S-K and Instruction 1 to Item 402(j).

Certain Relationships and Related Party Transactions, page 16

41. Please disclose the name of the “non-controlling interest partner” you refer to in this section or advise why it is not appropriate for you to do so. Please refer to item 404(a)(1) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information that the Securities Act of 1933, Exchange Act of 1934 and all applicable Securities Act and 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal

securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

In responding to our comments directed to the Exchange Act filings, 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 Robert Babula, Staff Accountant, at (202) 551-339 or in his absence Donna DiSilvio, Senior Staff Accountant, at (202) 551-3202 if you have questions regarding comments on the financial statements and related matters. Please contact Robert W. Errett, Staff Attorney, at (202) 551-3225, or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings  
Assistant Director

cc: Edwin L. Miller, Jr.  
Sullivan & Worcester LLP  
Via facsimile