

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Date of report (Date of earliest event reported):

**May 25, 2010**

**AGY HOLDING CORP.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**335-150749**  
(Commission File Number)

**20-0420637**  
(IRS Employer  
Identification No.)

**2556 Wagener Road**  
**Aiken, South Carolina**  
(Address of principal executive offices)

**29801**  
(Zip Code)

**(888) 434-0945**  
(Registrant's telephone number, including area code)

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Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

(b) Jeffrey Davis has tendered his resignation as President and Chief Operating Officer of AGY Holding Corp., effective as of May 28, 2010.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AGY HOLDING CORP.

Date: June 1, 2010

By: \_\_\_\_\_  
Name: Douglas J. Mattscheck  
Title: Chief Executive Officer