
**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): **October 6, 2009**

FIBERTOWER CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

000-21091
(Commission File
Number)

52-1869023
(I.R.S. Employer Identification
No.)

185 Berry Street
Suite 4800
San Francisco, California
(Address of principal executive offices)

94107
(Zip Code)

Registrant's telephone number, including area code: **(415) 659-3500**

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 (see General Instruction A.2. below):

- 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 13e-4(c) 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))
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Item 8.01 Other Events.

FiberTower Corporation has elected to pay the upcoming November 15, 2009 interest payment on its 9.00% Convertible Senior Secured Notes due 2012 (the "Notes") entirely by the issuance of additional Notes, as permitted under the indenture governing the Notes. The carrying value of the Notes as of June 30, 2009 was \$304.5 million (including \$27.2 million in accreted value). The Company also has the option of making either or both of the semi-annual interest payments due in 2010 with additional Notes in lieu of cash. The interest rate applicable to any such interest payments made in additional Notes will be 11%.

SIGNATURES

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.

FIBERTOWER CORPORATION

Date: October 6, 2009

By: /s/ Thomas A. Scott
Name: Thomas A. Scott
Title: Chief Financial Officer