

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 5, 2010**

CLECO CORPORATION

(Exact name of registrant as specified in its charter)

Louisiana
(State or other jurisdiction
of incorporation)

1-15759
(Commission File Number)

72-1445282
(IRS Employer
Identification No.)

2030 Donahue Ferry Road
Pineville, Louisiana
(Address of principal executive offices)

71360-5226
(Zip Code)

Registrant's telephone number, including area code: **(318) 484-7400**

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 2.02 Results of Operations and Financial Condition.

On May 5, 2010, Cleco Corporation (the “Company”) reported earnings for the quarter ended March 31, 2010. For additional information regarding the Company’s earnings for this period, please refer to the press release attached to this report as Exhibit 99.1 (the “Press Release”), which is incorporated by reference herein. The information in the Press Release is being furnished, not filed, for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to liabilities under that section. Accordingly, the information in the Press Release will not be incorporated by reference into any registration statement filed by the Company under the Securities Act of 1933, as amended, unless specifically identified therein as being incorporated therein by reference. The furnishing of the information in this report is not intended to, and does not, constitute a determination or admission by the Company that the information in this report is material or complete, or that investors should consider this information before making an investment decision with respect to any security of the Company or of any of its subsidiaries, including Cleco Power LLC.

At 11:00 a.m. EDT (10:00 a.m. CDT), Thursday, May 6, 2010, management of the Company will host a conference call to discuss the Company’s results for the quarter ended March 31, 2010. The call will be broadcast live on the Internet, and replays will be available for 12 months. The web cast may be accessed through the Company’s website at www.cleco.com by selecting “For Investors,” and then “Cleco Corporation First-Quarter 2010 Earnings Conference Call.”

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

The following exhibit is furnished herewith:

99.1 Press Release issued May 5, 2010, regarding Cleco Corporation’s earnings for the quarter ended March 31, 2010

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 thereunto duly authorized.

CLECO CORPORATION

Date: May 5, 2010

By: /s/ R. Russell Davis
R. Russell Davis
Vice President – Investor Relations and
Chief Accounting Officer

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Exhibit Description</u>
99.1	Press Release issued May 5, 2010 regarding Cleco Corporation's earnings for the quarter ended March 31, 2010.