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): September 17, 2004

Emerson Electric Co.

(Exact Name of Registrant as Specified in Charter)

Missouri

(State or Other

Jurisdiction of

Incorporation)

1-278 (Commission

File Number)

43-0259330

(I.R.S. Employer Indentification Number)

8000 West Florissant Avenue St. Louis, Missouri

(Address of Principal Executive Offices)

Registrant's telephone number, including area code:

(314) 553-2000

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 Principal Officers; Election of Directors; Appointment of Principal Officers.

(b) On September 17, 2004, Charles F. Knight announced his resignation as a member of the Board of Directors and all committees of the Board of which he was a member, as Chairman of the Board, as an officer and as an employee of Emerson Electric Co. David Farr, Emerson's chief executive officer, has been elected to the additional position of chairman of the board to fill the vacancy created by Mr. Knight's resignation.

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.

(Zip Code)

63136

EMERSON ELECTRIC CO.

Date: September 17, 2004

By: ____/s/ H.M. Smith

H. M. Smith Assistant General Counsel and Assistant Secretary