

UNITED STATES OF AMERICA  
Before the  
SECURITIES AND EXCHANGE COMMISSION

SECURITIES EXCHANGE ACT OF 1934  
Release No. 63535 / December 14, 2010

The Securities and Exchange Commission (“Commission”) announced the temporary suspension, pursuant to Section 12(k) of the Securities Exchange Act of 1934 (the “Exchange Act”), of trading in the securities of Alternate Energy Holdings, Inc. (“AEHI”), of Eagle, Idaho at 9:30 a.m. EST on December 14, 2010, and terminating at 11:59 p.m. EST on December 28, 2010.

The Commission temporarily suspended trading in the securities of AEHI because of questions that have been raised about the accuracy and adequacy of publicly disseminated information concerning, among other things, the stock sales of certain AEHI officers, the status and viability of funding to build a nuclear reactor, and executive compensation.

The Commission cautions brokers, dealers, shareholders, and prospective purchasers that they should carefully consider the foregoing information along with all other currently available information and any information subsequently issued by the company.

Further, brokers and dealers should be alert to the fact that, pursuant to Rule 15c2-11 under the Exchange Act, at the termination of the trading suspension, no quotation may be entered unless and until they have strictly complied with all of the provisions of the rule. If any broker or dealer has any questions as to whether or not he has complied with the rule, he should not enter any quotation but immediately contact the staff in the Division of Trading and Markets, Office of Interpretation and Guidance, at (202) 551-5777. If any broker or dealer is uncertain as to what is required by Rule 15c2-11, he should refrain from entering quotations relating to AEHI securities until such time as he has familiarized himself with the rule and is certain that all of its provisions have been met. If any broker or dealer enters any quotation which is in violation of the rule, the Commission will consider the need for prompt enforcement action.

If any broker, dealer or other person has any information which may relate to this matter, he should contact Michael S. Dicke or Tracy L. Davis of the San Francisco Regional Office of the Securities and Exchange Commission at (415) 705-2500.