



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

February 2, 2012

Via facsimile

Mr. Michael D. Bennett
VP, Chief Financial Officer, Secretary and Treasurer
MFRI, Inc.
7720 N. Leigh Avenue
Niles, IL 60714

Re: MFRI, Inc.
Form 10-K for the fiscal year ended January 31, 2011
Filed April 14, 2011
Definitive Proxy Statement on Schedule 14A
Filed May 27, 2011
Forms 10-Q for the periods ended April 30, 2011, July 31, 2011 and October 31, 2011
Filed June 13, 2011, September 14, 2011 and December 12, 2011
File No. 1-32530

Dear Mr. Bennett:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ John Cash

John Cash
Branch Chief