



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

April 2, 2009

VIA U.S. MAIL

Susan E. Knight
Chief Financial Officer
MTS Systems Corporation
14000 Technology Drive
Eden Prairie, Minnesota 55344

Re: MTS Systems Corporation
Form 10-K for the year ended September 27, 2008
Filed November 25, 2008
File No. 000-09459

Dear Ms. Knight:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Angela Crane
Branch Chief