



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