

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

August 22, 2011

Via E-mail
Eric C. Scroggins
Vice President – General Counsel and Secretary
Allison Transmission Holdings, Inc.
4700 West 10th Street
Indianapolis, IN 46222

Re: Allison Transmission Holdings, Inc.

Amendment No. 4 to Registration Statement on Form S-1

Filed August 10, 2011 File No. 333-172932

Dear Mr. Scroggins:

We have received your response to our prior comment letter dated July 1, 2011 and have the following additional comments.

Comparison of three months ended June 30, 2011 and 2010, page 52

Net Sales, page 52

1. Where variances in line items are the result of more than one factor and/or of offsetting factors, the impact of each individually significant factor should be quantified. Please expand your disclosure to more fully comply with this guidance. Our comment applies to your discussion of net sales for the six months ended June 30, 2011 and 2010, as well.

Underwriting, page 131

2. We note your response to our prior comment three and reissue in part. Please revise to name the underwriters that hold the Senior Cash Pay Notes and the principal amount of the notes held by these underwriters. We further note your disclosure in the last paragraph on page 134. Please also revise your "Use of Proceeds" section to cross-reference this information.

Eric C. Scroggins Allison Transmission Holdings, Inc. August 22, 2011 Page 2

You may contact Amy Geddes at (202) 551-3304 or Margery Reich at (202) 551-3347 if you have questions regarding comments on the financial statements and related matters. You may contact Chanda DeLong at (202) 551-3490 or me at (202) 551-3642 with any other questions.

Sincerely,

/s/ Loan Lauren P. Nguyen

Loan Lauren P. Nguyen Special Counsel