

April 26, 2011

VIA EDGAR AND OVERNIGHT DELIVERY

Laura Nguyen
Attorney-Advisor
Division of Corporation Finance
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: **Allison Transmission Holdings, Inc.**
Registration Statement on Form S-1
Filed March 18, 2011
File No. 333-172932

Dear Ms. Nguyen:

On behalf of our client, Allison Transmission Holdings, Inc., a Delaware corporation (the “Company”), and pursuant to the applicable provisions of the Securities Act of 1933, as amended, and the rules promulgated thereunder, please find enclosed for filing with the Securities and Exchange Commission (the “Commission”) a complete copy of Amendment No. 1 (“Amendment No. 1”) to the above-captioned Registration Statement on Form S-1 of the Company filed with the Commission on March 18, 2011 (collectively, the “Registration Statement”).

This amendment reflects certain revisions of the Registration Statement in response to the comment letter to Mr. Eric C. Scroggins, the Company’s Vice President—General Counsel and Secretary, dated April 14, 2011, from the staff of the Commission (the “Staff”). For your convenience we are also providing copies of Amendment No. 1, marked to show changes against the Registration Statement, in the traditional non-EDGAR format to each of Chanda DeLong and you.

The numbered paragraphs in italics below set forth the Staff’s comments together with the Company’s response. Unless otherwise indicated, capitalized terms used herein have the meanings assigned to them in the Registration Statement.

General

1. *Prior to printing and distribution of the preliminary prospectus, please provide us with mock-ups of any pages that include any pictures or graphics to be presented. Accompanying captions, if any, should also be provided.*

Response: The Company has included the proposed artwork in Amendment No. 1 on the inside front and back covers of the prospectus.

Market and Industry Data, page ii

2. *We note that you have relied on reports from third-party sources, including ACT Research, Frost & Sullivan, J.D. Power and Associates, and Ward's Automotive Group, for data. If any of these sources is not generally publicly available for free or at a nominal cost, please provide a consent pursuant to Rule 436 or tell us why you believe a consent is not required.*

Response: The Company respectfully submits that it believes a consent pursuant to Rule 436 is not required. The Company respectfully advises the Staff that it did not commission any of the studies or reports cited in the Registration Statement and none of those studies or reports were prepared in connection with the Registration Statement. In addition, the Company respectfully advises the Staff that the information contained in the studies or reports cited in the Registration Statement is publicly available for free or available on a subscription fee basis and is widely utilized by industry participants.

Prospectus Summary, page 1

3. *Please revise to eliminate certain redundancies in the prospectus summary as the summary should succinctly describe your business operations. We note that you describe the Acquisition Transaction on page 2 and again on page 7. You also cite the same statistics about the company's increased market share in North American on-highway markets on page 4 and again on page 8. You also state that the company has "more new products under development today than at any time in [their] history" on page 2 and again on page 8. We also note that your disclosure under the headings "Expand Our Global Leadership" on page 7 and "Continue Development of New Technologies and Products" on page 8 substantially duplicates disclosure elsewhere in your "Summary" section.*

Response: The Company has revised the disclosure on pages 2, 3, 6, 7 and 8 in response to the Staff's comments.

Company Overview, page 1

4. *Please revise your first sentence to state the basis for your conclusion regarding your position as the "largest" manufacturer of fully-automatic transmissions for various commercial vehicles. In particular, please disclose how you are measuring market*

position and tell us the source of the information supporting your conclusions. While we note your presence in other countries, approximately 82% of your net sales were generated from North America. Provide similar disclosure for your statements in paragraph three regarding your "leading market position."

Response: The Company respectively asserts that the Company is the world's largest manufacturer of fully-automatic transmissions by any relevant metric, including units sold and net sales, for the following fully-automatic transmission markets outlined in the first sentence, which include: (i) medium- and heavy-duty commercial vehicles, (ii) hybrid-propulsion systems for transit buses and (iii) medium- and heavy-tactical U.S. military vehicles. The market for fully-automatic transmissions for medium- and heavy-duty commercial vehicles in North America and Western Europe is estimated to have a volume of approximately 81,892 units for 2010, according to the Frost and Sullivan report entitled "Strategic Outlook of the Western European and North American Medium- and Heavy-duty Commercial Vehicle Transmissions Original Equipment Market." In 2010, the Company estimates that it sold approximately 62,481 units in the North American market for medium- and heavy-duty commercial vehicles alone, which represented approximately 76% of all fully-automatic transmissions for medium- and heavy-duty commercial vehicles sold in North America and Western Europe.¹ The Company estimates that as of 2010 its largest known global competitors in the hybrid-propulsion systems for transit buses market, BAE Systems plc, Eaton Corp. and Hino Motors, Ltd., have had aggregate production volumes of approximately 2,870, 2,000 and 150 units, respectively. The Company estimates that as of 2010 its aggregate production volume was 4,024 units globally, which is a larger aggregate volume than any of its largest known competitors in the global hybrid-propulsion systems for transit buses market. Prior to the U.S. military's recent purchase of the Caiman Multi-Terrain Vehicle, which employs a fully-automatic transmission manufactured by Caterpillar Inc., the Company had supplied all fully-automatic transmissions for medium- and heavy-tactical U.S. military vehicles since 1980. Based upon these facts and internal estimates, the Company believes it has sold "substantially all" fully-automatic transmissions for U.S. military purchases of medium- and heavy-tactical military vehicles since 1980.

Further, units sold are directly correlated to net sales, and the Company is unaware of any competitor in these three markets that has a substantial market share or that offers fully-automatic transmissions at a price point per unit that would allow any of the Company's identified competitors to have a greater share of the units sold or net sales in these markets. As a result of the Company's market share in each of these markets, the Company believes that it would be mathematically impossible for any competitor to be "larger" than the Company by any relevant metric.

¹ According to AutomotiveWorld.com's report entitled "Transmission automation trends in the global commercial vehicle industry," in 2010 the penetration rate of fully-automatic transmissions outside of North America was approximately 5%. Due to this low penetration rate in emerging markets, we believe that even if all fully-automatic transmissions sales for medium- and heavy-duty commercial vehicles outside of North America and Western Europe went to a single supplier other than the Company, the Company would still be the world's largest supplier of medium- and heavy-duty commercial vehicles. As such, the Company conservatively estimates its global market share to be approximately 60%, making it the largest global manufacturer of fully-automatic transmissions for medium- and heavy-duty commercial vehicles.

Pursuant to Rule 418(b) under the Securities Act of 1933, as amended (the "Securities Act"), the Company is supplementally furnishing with this response a copy of each report cited above. Each report has been marked to indicate the data referenced in this response. The Company hereby requests that these materials be returned to the Company upon completion of the Staff's review and that, pending such return, these materials be withheld from release. The supplemental materials are not being furnished in electronic format, and are not being filed with nor deemed part of the Registration Statement nor any amendment thereto.

5. *Please provide support for your statement that the Allison brand is one of the most recognized in the industry "as a result of the performance, reliability and fuel efficiency of [y]our transmissions" or state as a belief of management. Also revise the first sentence of the third paragraph on page 1 and throughout the prospectus accordingly.*

Response: The Company has revised the disclosure on pages 1 and 64 in response to the Staff's comments to qualify the statement as a belief of management.

6. *Please briefly disclose here and on page 61 how you are "well-positioned to capitalize on numerous attractive growth opportunities" and either provide verifiable support for this conclusion or state as a belief of management. Also make similar revisions related to your "strong position" to capitalize on growth trends in your industry on page 6.*

Response: The Company has revised the disclosure on pages 1, 2, 6 and 64 in response to the Staff's comments to indicate how the Company is well positioned to capitalize on the growth opportunities it has identified and to qualify the statement as a belief of management.

7. *Refer to the last sentence of the first paragraph. Revise here and on page 61 to include comparable financial data for years ended December 31, 2009 and December 31, 2008. Providing that financial information will assist investors in evaluating the information presented.*

Response: The Company has revised the disclosure on pages 1 and 64 in response to the Staff's comment.

8. *Please remove qualitative phrases or terms from the prospectus as these phrases or terms are qualitative and unverifiable, or advise. In this regard, please delete "end users often specify an 'Allison' transmission when ordering a commercial vehicle, creating a pull-through demand for our products" on page 1, "compelling value proposition" on page 1 and on page 5 and "superior value proposition" on page 5. Please also quantify "numerous." Please also make similar revisions in the Business section.*

Response: The Company has revised the disclosure on pages 1, 5, 7, 64 and 78 in response to the Staff's comments. With respect to the comment to delete "end users often specify an 'Allison' transmission when ordering a commercial vehicle, creating a pull-through demand for our products" on page 1, the Company has modified this statement to note that it is a belief of the Company. The Company believes, based on its sales strategy and an analysis of its sales

described more fully below, that end users do, in fact, frequently specify an 'Allison' transmission when ordering a commercial vehicle where the Company's transmissions are offered as an alternative to a manual or an AMT. Specifically, the Company employs a "push" and "pull" sales strategy for its product. On one hand, the Company "pushes" the product by working with OEMs to engineer and make available Allison transmissions as the OEM's exclusive, standard or optional transmission for their products. On the other hand, the Company "pulls" the product by educating and marketing to the OEMs' various customers and end markets generally. This "pull" strategy is intended to lead the end user to specify Allison products when they select their OEM and the powertrain (i.e., engine and transmission) components of the vehicles they order from the OEMs. The Company believes that as a result of its "push" and "pull" strategy, its unit volumes sold and market share demonstrate that OEMs are offering Allison transmissions and end users are frequently specifying the product.

9. *Please delete the phrase "enduring competitive advantage" or provide quantifiable support that such an advantage exists. Similarly revise on page 5.*

Response: The Company has revised the disclosure on pages 2, 6, 64 and 79 in response to the Staff's comment.

10. *We note your discussion of the "increasing trend towards automaticity" and the "anticipated growth" of the automatic transmissions market outside of North America in the first paragraph on page 2. Remove these references or provide more detailed support to substantiate the claims you make about growth in this market segment. The statistics cited regarding low adoption rates outside North America and the company's growth of market share within North America (see page 4, "Trend toward automaticity") do not necessarily support claims of automaticity growth in foreign markets. Make the same changes throughout your filing, as applicable, including on pages 61 - 62. In this regard, please also revise to provide balancing disclosure here, in the MD&A and Business sections and throughout the prospectus stating that you cannot provide any assurance that such growth will develop.*

Response: The Company has revised the disclosure on pages 2, 4, 8, 44, 64, 65 and 70 in response to the Staff's comments.

11. *Please revise to delete the phrase "poised for continued recovery," as the data you have provided does not support the assertion that the recovery will necessarily be a "continued" one.*

Response: The Company has revised the disclosure on pages 2 and 64 in response to the Staff's comment.

12. *Refer to language such as "strong margins" and "strong and sustainable financial profile" in the second paragraph on page 2 and the first full paragraph on page 62. Please balance this disclosure with a brief discussion of the company's current debt*

burden, past net operating losses, and historical margin ratios. Similarly revise disclosure such as “we have generated strong margins” on page 6.

Response: The Company has revised the disclosure on pages 2, 6 and 65 in response to the Staff’s comments.

Recovery of commercial vehicle demand in developed markets, page 4

13. *Please revise to clarify that even if the North America market experiences an annual growth rate of 20.4% from 2010-2013, the production units will still be below the 1999-2008 average. Similarly revise under the “Expand Our Global Leadership” section on page 7. Also revise to provide balancing disclosure to state that you cannot provide any guarantee that such growth rates will materialize in the future.*

Response: The Company has revised the disclosure on pages 4, 7 and 64 in response to the Staff’s comments.

14. *Please revise to provide the percentage of net sales that you derive from Western Europe so that investors can assess the effect on your business of a recovery in that market.*

Response: The Company has revised the disclosure on page 4 in response to the Staff’s comment.

15. *Please delete the word “significant” in relation to your future earnings growth and the word “considerable” in the first paragraph on page 5.*

Response: The Company has revised the disclosure on pages 2, 6, 8, 65 and 70 in response to the Staff’s comment.

Growth in commercial vehicle demand in emerging markets, page 4

16. *Please balance this disclosure by disclosing that manual transmissions are the predominant transmissions used in commercial vehicles key emerging markets such as China. Quantify the percentage of the market share currently occupied by fully-automatic transmissions, if available.*

Response: The Company has revised the disclosure on pages 4 and 72 in response to the Staff’s comments.

Trend toward automaticity, page 4

17. *Please rephrase the title of this section, as you do not appear to have provided quantifiable data to support that there is a “trend” towards automaticity. We note, for example, that well-developed markets such as Western Europe are still dominated by manual transmissions and it is unclear whether there is sufficient evidence that emerging markets will follow North America in its adoption of automaticity. Please also provide*

the basis for your belief that your increased share of transmissions sold in North America on-highway markets is “representative of the overall market trend toward automaticity.”

Response: The Company has revised the disclosure on page 4 in response to the Staff’s comments and has eliminated the statement that the Company’s increased share of transmissions sold in North America on-highway markets is “representative of the overall market trend toward automaticity.”

Increasing emphasis on fuel efficiency and lower emissions, page 4

18. *Please revise to disclose that demand for your hybrid-propulsion systems for transit buses decreased in 2010 or advise.*

Response: The Company has revised the disclosure on page 5 in response to the Staff’s comment.

19. *Please revise the last sentence of the last paragraph on page 4 and elsewhere as appropriate to remove the use of compound annual growth rate of 72.3% and 20.1%, as this measurement only shows two snapshots in time and may not be representative of growth over the entire time period.*

Response: The Company has revised the disclosure on page 5 in response to the Staff’s comment.

Continued demand for reliable fully-automatic transmissions in military products, page 5

20. *We note your statement that the company expects future defense spending on vehicles to decline. Please revise the heading of this section to reflect this information.*

Response: The Company has revised the disclosure on page 5 in response to the Staff’s comment.

Premier Brand and Superior Value Proposition, page 5

21. *Please provide quantifiable support for your statement that you deliver end users “strong returns” on their investments. Please also provide the basis for your belief that customers will be reluctant to purchase from other manufacturers.*

Response: The Company has revised the disclosure on page 5 in response to the Staff’s comments to state that the Company intends to deliver end users “strong returns” as a stated goal and to eliminate the statement that customers will be reluctant to purchase from other manufacturers.

Technology Leadership and Customization Capabilities, page 5

22. *Please provide support for your belief that your product technology is highly differentiated from other transmission manufacturers or remove reference to such manufacturers.*

Response: The Company has revised the disclosure on page 6 in response to the Staff's comment to remove reference to such manufacturers.

Diverse End Markets, page 7

23. *While your disclosure on page 9 states that net sales are concentrated in the company's top five customers, you state here that you benefit from serving a wide range of customers. Please revise the disclosure here to remove the inconsistency. Also include the percentage of net sales these top five customers accounted for in fiscal years 2008 through 2010.*

Response: The Company has revised the disclosure on page 7 in response to the Staff's comments. The Company's "Diverse End Markets" competitive strength is focused on the diversity of the Company's end markets and not its customers and, as a result, the Company has deleted the word "customers" from the first sentence of this competitive strength. However, the Company notes that while its top five OEM customers accounted for approximately 41% of its net sales in 2010, its top two customers each only accounted for approximately 10% of net sales in 2010 and the Company sold units to over 300 OEM customers in 2010 and believes that it does have a diverse customer base.

Proven Management Team, page 7

24. *Please delete the word "proven" in regards to your management team.*

Response: The Company has revised the disclosure on page 7 in response to the Staff's comment.

Accelerate Penetration of Our Products in Emerging Markets, page 8

25. *Revise as to statements that imply automaticity has increased or will increase outside North America and in emerging markets on page 8. Balance the disclosure by discussing the possibility that adoption of automatic transmissions will fail to increase in markets outside of North America. Describe factors which might contribute to this failure, such as the entrenched use of manual transmissions, high levels of OEM integration, or the company's limited brand recognition in new markets. Make the same changes to pages 67 - 68 in the discussion of markets outside North America.*

Response: The Company has revised the disclosure on pages 7, 8 and 70 in response to the Staff's comments.

Leverage Our Efficient Cost Structure to Deliver Strong Cash Flow, page 8

26. *We note disclosure here that you believe one of your competitive advantages is your efficient cost structure and your disciplined approach to capital expenditures. However, we note disclosure on page 28 which highlights your substantial total debt of \$3.7 billion. Please revise to provide balancing disclosure given your substantial indebtedness.*

Response: The Company has revised the disclosure on page 8 in response to the Staff's comment.

Summary Historical Financial Data, page 12

Non-GAAP Measures

27. *Your attention is invited to Endnote 44 to Release No. 33-8176. With regard to your statement as to why management believes the non-GAAP financial measures provides useful information to investors, the justification for the use of the measure must be substantive. The fact that the measure is "useful to analysts" is not sufficient support for the presentation. Please further explain what you mean by "core operating performance" and why you consider it useful. In addition, please expand your explanation to separately address the usefulness of each of the three non-GAAP measures. If there are particular purposes for which management uses any or each of the separate measures, please specifically disclose them.*

Response: The Company has revised the disclosure on page 13 in response to the Staff's comments.

Risk Factors, page 16

28. *Please revise the last sentence of your introductory paragraph to delete reference to unknown or immaterial risks.*

Response: The Company has revised the disclosure on page 16 in response to the Staff's comment.

29. *Please move the risk factor entitled, "We have experienced significant losses..." to the forefront of the Risk Factors section.*

Response: The Company has revised the disclosure on page 16 in response to the Staff's comments.

Continued volatility in and disruption to the global economic environment, page 16

30. *Please revise to disclose the economic and market conditions that resulted in the decrease in commercial vehicles sales which continue to affect your sales. Also disclose your net losses for the 2008 and 2009 periods.*

Response: The Company has revised the disclosure on page 17 in response to the Staff's comments.

Our long-term growth prospects, page 17

31. *Please revise the heading to accurately reflect the risk that the rate of adoption of fully- automatic transmissions may not increase outside North America, which could impair your long-term growth prospects and results of operations. Also, explain what factors may contribute to automaticity in foreign markets not increasing as you have anticipated.*

Response: The Company has revised the disclosure on pages 16 and 17 in response to the Staff's comments.

Any events that impact our brand name, page 17

32. *Revise to provide greater detail about the defect and warranty issues associated with your products, including the H 40/50 EP hybrid-propulsion transit bus system. Please disclose the number of transmissions affected and the cost of any recall or redesign.*

Response: The Company has revised the disclosure on pages 17 and 18 in response to the Staff's comments.

Sales of our hybrid-propulsion products, page 18

33. *Please further describe the government subsidy programs, including the amounts of subsidies received, when the programs started, which specific governmental entities provide the greatest share of the subsidies, and whether those governments are facing or have recently faced significant budgetary or fiscal problems.*

Response: The Company has revised the disclosure on page 18 in response to the Staff's comments.

Our sales are concentrated, page 18

34. *Please advise whether the "late payment by a significant customer" in 2010 was made by one of the company's top five customers. If so, please revise to discuss the risks of future late payments in this section.*

Response: The Company has revised the disclosure on page 19 in response to the Staff's comments.

Increases in cost, disruption of supply, page 21

35. Please update this section to include a discussion of the effects of the Japanese earthquake and tsunami on your supply chain and business, if material. Similarly revise your disclosure on page 68.

Response: The Company has revised the disclosure on pages 22 and 72 in response to the Staff's comments.

36. We note disclosure in the second paragraph which states that you rely on materials from a "limited number of fully-validated suppliers." Please revise to disclose the number of suppliers that you rely on for your raw materials and components.

Response: The Company has revised the disclosure on page 21 in response to the Staff's comments.

Our ability to effectively operate, page 24

37. Generally, you should not present risks that could apply to any issuer or any offering. For example, please revise this risk factor, the "We are subject to risks from litigation" risk factor on page 28, the "If securities analysts do not publish research reports" risk factor on page 32, and elsewhere, as applicable, to explain specifically how the risk affects the company or the securities being offered. Refer to Item 503(c) of Regulation S-K.

Response: The Company has deleted the risks on pages 24, 28, 30 and 32 in response to the Staff's comments.

38. Please revise to remove the second sentence of the risk factor as such disclosure undermines the risks disclosed.

Response: The Company deleted the entire risk on page 24 in response to the Staff's comments as this risk could apply to any issuer.

Risks Related to Our Indebtedness, page 28

39. Please revise to cross-reference the relevant discussions in the MD&A section (see pages 54 - 57) when discussing the Senior Secured Credit Facility, Senior Cash Pay Notes, and Senior Toggle Notes here.

Response: The Company has revised the disclosure on page 28 in response to the Staff's comments.

Risks Related to This Offering and Ownership of our Common Stock, page 30

40. *Refer to the second item under this heading. Discuss the consideration given to the disclosure requirements of Rule 12-04 of Regulation S-X and Rule 4-08 (e)(3) of Regulation S-X.*

Response: In response to Comment 40, the Company has revised the disclosure on page 30 to delete the referenced risk. However, the Company has added the financial statements of the parent company (Allison Transmission Holdings, Inc.) in accordance with Rule 12-04 beginning on page F-45. In addition, the Company has added the disclosures required under Rule 4-08(e)(3) of Regulation S-X on page F-44 in response to the Staff's comment.

We are controlled by Carlyle and Onex, page 32

41. *We note disclosure on page 100 which states that ATI pays your Sponsor an annual fee for certain advisory and consulting services. Please revise to disclose such terms here.*

Response: The Company has revised the disclosure on page 32 in response to the Staff's comment.

Our management will have broad discretion over the use of the net proceeds, page 33

42. *We note your statement that "management will have broad discretion over the use of the net proceeds from this offering." You may reserve the right to change the use of proceeds provided that such reservation is due to certain contingencies that are discussed specifically and the alternatives to such use in that event are indicated. Refer to Instruction 7 to Item 504 of Regulation S-K. Please revise accordingly.*

Response: The Company has revised the disclosure on page 32 in response to the Staff's comments by removal of the risk factor entitled "Our management will have broad discretion over the use of the net proceeds from this offering and might not apply the proceeds of this offering in ways that increase the value of your investment" and will further describe the anticipated use of proceeds in a subsequent amendment.

Use of Proceeds, page 36

43. *Please revise to state the approximate amount intended to be used to repay indebtedness and for general corporate purposes, respectively. Refer to Item 504 of Regulation S-K. Also revise to provide details regarding the indebtedness to be repaid, including the interest rate and date of maturity.*

Response: The Company will revise the disclosure on page 37 in a subsequent amendment and will provide the information required by Item 504 of Regulation S-K at that time in response to the Staff's comments.

Management's Discussion & Analysis, page 43

Trends impacting our business, page 43

44. *Please balance the disclosure by including a discussion about the possibility of volatile or declining energy and commodity prices, declines in military agency budgets, and declining demand and subsidies for hybrid-propulsion systems in the first, second, and third full paragraphs on page 44, respectively. This will assist investors assessing your business.*

Response: The Company has revised the disclosure on page 45 in response to the Staff's comments.

45. *Please substantiate your belief that there is "pent up demand" that resulted from the deferral of purchases during the economic downturn.*

Response: Based on third party research conducted by ACT Research, one of the demand drivers for the Class 8 heavy-duty market is the age of the fleet. ACT Research states that the Class 8 fleet is at the oldest-ever levels, which is indicative of underinvestment and signals pent-up replacement demand. Analysts at ACT Research have stated that, "[t]he combination of rising freight volumes, improving trucker profits, rising used equipment values and the oldest North American fleet on record have led to a resurgence in demand for new commercial vehicles." They further state that because of improved fleet financial performance and easing of credit activity, demand, which was deferred for the past two years, will increase. In addition, ACT Research has determined that the medium-duty Class 4-7 market is "expected to take a similar trend, although not as strong," as the heavy-duty market. Based on these statistics, the Company believes that there is pent up demand that has resulted from deferral of purchases during the economic downturn.

Pursuant to Rule 418(b) under the Securities Act of 1933, the Company is supplementally furnishing with this response a copy of the report cited above. The report has been marked to indicate the data referenced in this response. The Company hereby requests that these materials be returned to the Company upon completion of the Staff's review and that, pending such return, these materials be withheld from release. The supplemental materials are not being furnished in electronic format, and are not being filed with nor deemed part of the Registration Statement nor any amendment thereto.

Comparison of years ended December 31, 2010 and 2009, page 48

46. *Please revise your explanations of changes to quantify the individually significant factors cited in such explanations. For example, your discussion of gross profit on page 49 cites both higher volumes and price increases as factors leading to higher gross profit during fiscal 2010, but the impact of such changes is not discernable from the information provided. You should review your entire discussion of results of operations as the example cited is not meant to be all inclusive. Consider tabular format for clarity.*

Response: The Company has revised the disclosure on pages 51 to 54 in response to the Staff's comments. Specifically, the Company has expanded its disclosure for both comparisons of 2010 to 2009 and 2009 to 2008.

Net sales, page 49

47. We note the "lower demand for hybrid-propulsion systems for transit buses" in the year ended December 31, 2010. Please describe the extent of this recent decline in demand.

Response: The Company has revised the disclosure on page 51 in response to the Staff's comments.

Cash Used for Financing Activities, page 53

48. Please disclose your current total secured leverage ratio.

Response: The Company has revised the disclosure on page 57 in response to the Staff's comments to include a table that details the December 31, 2010 and March 31, 2011 actual ratio versus the required ratio as well as required ratio for the remainder of 2011.

49. We note from your disclosure on page 54 that certain of your interest rate derivatives contain credit-risk and collateral contingent features, and that as of December 31, 2010, driven by lower interest rates, you have been required to post additional collateral of \$41.9 million beyond your \$2.0 million independent collateral requirement. Please revise your disclosure to indicate the maximum collateral you may have to post and under what circumstances the maximum collateral would be required.

Response: The Company has certain interest rate derivatives that contain provisions under which it is required to post collateral. Specifically, the Company is required to post \$2.0 million independent collateral for the entire duration for two of the interest rate derivatives. The Company is also required to post additional collateral beyond its independent collateral requirement as the LIBOR interest rate curve shifts downward. There is no stipulated maximum collateral amount that the Company may ultimately have to post. Generally, the Company's collateral posting requirement increases when the LIBOR interest rate curve shifts lower. Conversely, the Company's collateral posting requirement decreases when the LIBOR interest rate curve shifts higher and any previously posted collateral is returned to the Company. At December 31, 2010 and March 31, 2011, the Company had additional collateral balances of \$41.9 million and \$38.3 million, respectively.

The Company has revised the disclosure on pages 57 and 58 in response to the Staff's comments to indicate that there is no stipulation on the maximum collateral amount the Company may have to post and that further downward shifts in the LIBOR interest rate curve may require the Company to post additional collateral.

Business, page 61

50. *Revise to provide more balanced disclosure throughout this section. For example, specify in numerical detail the current market share for manual transmissions and the level of integration in foreign markets on page 69, discuss whether production of MRAP vehicles is decreasing on page 69 (see “Net Sales” on page 50), if applicable, note other factors besides “improvement in product quality and durability” which contributed to reduced aftermarket sales on page 70, describe the possibility of declines in demand and subsidies for hybrid-propulsion systems on page 72 (see the risk factor entitled, “Sales of our hybrid-propulsion products may be negatively impacted” on page 18 and “Net Sales” on page 50), and explain any trends of declining sales on page 73.*

Response: The Company notes the Staff’s comment regarding balanced disclosure and advises the Staff that it has revised the disclosure on pages 70 through 73 and page 76. With regard to the disclosure regarding the rationale for reduced aftermarket sales, the Company respectfully advises the staff that it believes that the primary drivers of the reduction in aftermarket sales is the Company’s continuous improvements in the quality and durability of the Company’s transmissions. These enhancements have prolonged the useful life of the Company’s transmissions and we believe, directly account for the reduction in aftermarket sales.

With regard to the disclosure on page 76 regarding sales and marketing, the Company respectfully submits that this disclosure is a discussion of the Company’s sales and marketing organization, and as such does not discuss the Company’s net sales or trends related to the same. We have revised the heading on page 76 to clarify this point. We have included a discussion of the trends affecting the Company’s net sales in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” as well as in other sections of the Prospectus where net sales are referenced.

51. *Please attribute the statements in this section related to your industry to the third-party sources or advise.*

Response: The Company has revised the disclosure on pages 3 and 65 in response to the Staff’s comments.

Our Served Markets, page 64

52. *We note your discussion of changes in governmental emissions regulations and the associated “pre-buy” phenomenon on page 64. If material, please describe the previous and potential effects of emissions regulations and pre-buying as a separate risk factor, with its own subheading, in the Risk Factors section of the prospectus.*

Response: The Company respectfully submits that the potential effects of emissions regulations and pre-buying is not a material risk to the Company, and as a result, it has not included a separate risk factor on these topics in the Risk Factors section of the prospectus. Specifically, while the act of pre-buying can cause irregularity in transmission purchase patterns and potentially create forecasting challenges, the next round of emissions standards, scheduled

for 2013, is not expected to result in a significant pre-buy. Further, in the longer run, the Company views pre-buy as simply a shift in demand from one period to another, which makes the discussion on page 66 still relevant for investors as it explains that tightening emissions standards could potentially lead to uneven sales patterns in the future. However, as noted above, the Company does not view the potential for this shift in demand from one period to another as likely or as a material risk to the Company's operating results.

Determination of Compensation Awards, page 88

53. *We note disclosure which states that the compensation committee has not made "regular use" of benchmarking or of compensation consultants in making your executive compensation determinations. Please advise as to whether you used benchmarking or compensation consultants in your determination of the 2010 compensation levels for your executive officers.*

Response: The Company has revised the disclosure on page 92 in response to the Staff's comments to note that the Compensation Committee did not use benchmarking or compensation consultants in determining 2010 compensations levels for the Company's named executive officers.

Material U.S. Federal Tax Considerations for Non-U.S. Holders, page 111

54. *Delete the references to this discussion being for "general information only." Stockholders are entitled to rely upon the discussion.*

Response: The Company has revised the disclosure on page 120 in response to the Staff's comments.

Financial Statements

Notes to Consolidated Financial Statements

Note 1 - Overview

Recent Developments, page F-8

55. *Please disclose the financial impact of the manufacturing agreement contact termination.*

Response: The Company has revised the disclosure on page F-8 to include the financial impact of terminating the original agreement.

Note 5 — Goodwill and Intangible Assets, page F-16

56. We note from your disclosure here and elsewhere in your filing that you recorded impairment charges on your trade name intangible asset in fiscal 2008 and 2009, and that your 2010 annual review of indefinite life intangibles, including Goodwill and Trade name, resulted in fair values exceeding carrying amounts indicating no impairment. Please provide to us in your response a summary of your impairment testing.

Response:

Summary of Goodwill Impairment Test

The Company's goodwill relates to the acquisition of Allison Transmission, an operating unit of General Motors, in 2007. The Company evaluates goodwill for impairment on an annual basis at October 31 or more often if an event occurs or circumstances change that indicates impairment might exist. The result of the Company's 2010 annual goodwill impairment test indicated that the fair value of the reporting unit exceeded its carrying value of the net assets therefore the recorded goodwill was not subject to impairment. The fair value of the reporting unit was estimated to be \$6,225 million compared to the carrying value of \$4,440 million. The fair value was determined utilizing a discounted cash flow model. The cash flows forecast used in the Company's model was prepared using information available from customers, vendors, analysts, industry reports and other relevant sources and developed with support from a third party valuation firm. While unpredictable and inherently uncertain, the Company believes its forecast estimates are reasonable and incorporate those that market participants would use in their estimates of fair value.

Summary of Trade Name Impairment Test

The Company's trade name intangible asset relates to the acquisition of Allison Transmission, an operating unit of General Motors, in 2007. The Company evaluates trade name for impairment on an annual basis at October 31 or more often if an event occurs or circumstances change that indicates impairment might exist. As disclosed in Note 2 to the Company's consolidated financial statements, the Company recorded trade name impairment charges in 2008 and 2009 which were largely attributable to lower sales projections, weak economic conditions and an increase in the discount rate. The Company's sales forecast and overall business outlook significantly improved in 2010. Consequently, the result of the Company's 2010 annual trade name impairment test indicated that the fair value of the trade name exceeded its carrying value therefore the recorded trade name was not subject to impairment. The fair value of the trade name was estimated to be \$981 million compared to the carrying value of \$870 million. The fair value was determined utilizing an income approach by which the relief from royalty method (method under which an estimated value of the trade name is determined by the cost savings the Company achieves by not having to license the trade name) was applied. The sales forecast and royalty rate used in the Company's model was prepared using information available from customers, analysts, industry reports and other relevant sources and developed with support from a third party valuation firm. While unpredictable and inherently uncertain, the Company believes the Company's forecast estimates are reasonable and incorporate those that market participants would use in their estimates of fair value.

57. *As a related matter, please also reconcile your projections supporting no impairment with your statement on page 50 that your lack of taxable income for the purposes of the U.S. federal income tax payments supports your continuing policy of recording a full valuation allowance against your non-current deferred tax assets.*

Response: The Company's forecasts used for purposes of assessing the realizability of deferred tax assets under ASC 740 are consistent with the forecasts used for other purposes including assessing the recoverability of the Company's goodwill and trade name intangible asset. While the forecasts used are consistent between the two assessments, there is a difference in how the Company incorporates such information in the Company's evaluations. The deferred tax asset evaluation requires greater emphasis on historical data and future income whereas the goodwill and trade name evaluation involves utilizing fair value, sales and cash flows projections. For purposes of evaluating the realizability of the Company's deferred tax assets we have prescribed greater weight to losses incurred in recent years. The Company has incurred significant losses of \$323.9 million, \$328.1 million and \$164.3 million in 2009, 2008 and the successor period 2007, respectively. The Company reported net income of \$29.6 million in 2010 and had cumulative losses of \$623 million over the most recent three years. While the Company expects to generate income in future years, forecasts of future income are inherently subjective and did not overcome the significance of objectively verifiable negative evidence associated with cumulative losses in recent years, as required by ASC 740-10-30-23, given the significant level of cumulative losses. The Company will continue to assess the realizability of deferred tax assets and provide additional disclosures on potential adjustments to the valuation allowance when deemed appropriate.

Note 6 - Fair Value of Financial Instruments, page F-17

58. *You state that your available for sale securities are "associated with a license and exclusivity agreement with Torotrak." Please describe your significant rights and obligations under that agreement. Quantify the amounts paid to date as well as any amounts that may be paid in the future to obtain additional rights and/or in the form of royalties. Explain how the various expenditures are being accounted for. Tell us whether the shares of Torotrak were purchased at their fair value on the purchase date. If there is a separate engineering agreement, describe the significant contractual terms of that agreement as well. It appears that the agreements should be filed as exhibits.*

Response: The Company notes the Staff's comment and has included below additional clarification regarding the Company's rights and obligations related to the Torotrak PLC ("Torotrak") development agreement. The rights under the Torotrak agreement include (1) a non-exclusive license to use, make, and sell transmissions for use in commercial vehicles with a Gross Vehicle Weight ("GVW") less than 14,000 kg using Torotrak's patented and unpatented transmission technology, (2) Torotrak's agreement for a limited time period not to grant licenses to third parties to such patents and technology for use in commercial vehicles with a GVW either less than or greater than 14,000 kg, and (3) certain options. Such options include options exercisable before the second anniversary of the effective date of the Torotrak agreement to (a) extend the period of time during which Torotrak will not grant such licenses to third parties

while allowing Allison to retain a non-exclusive license for use in commercial vehicles with a GVW less than 14,000 kg, and (b) obtain an exclusive license (subject to pre-existing licenses granted by Torotrak) to such patents and technology for transmissions for use in commercial vehicles both less than and greater than 14,000 kg. In connection with the second anniversary of the effective date of the Torotrak agreement, Allison elected option (a). Allison also may elect option (b) above before the fourth anniversary of the effective date of the Torotrak agreement; if it does not do so, it will retain its then existing non-exclusive license.

Payments for the rights to develop Torotrak technology for GVW vehicles less than 14,000 kg were recorded as Engineering expense in the period in which the liability was recognized.

Payments for rights to exclude competitors from developing Torotrak's technology for vehicles with a GVW greater than 14,000 kg are capitalized as a defensive asset and was amortized to Engineering expense over the applicable period covered by these rights.

The Company through March 2011 has paid Torotrak approximately 8.4 million GBP (or approximately \$12.3 million USD). In addition, the Company in April 2011 elected to extend its agreement with Torotrak for another two years. The Company will pay Torotrak 3.5 million GBP in the second quarter of 2011 and an additional amount of approximately 3.3 million GBP in March 2012. The Company also has the right, at its option, to purchase exclusive perpetual full licenses for 10.0 million GBP.

In addition, in March 2009 the Company purchased for approximately \$3.4 million USD approximately 14.6 million shares of Torotrak common stock. This purchase represented approximately 10% of the outstanding common shares of Torotrak. The stock was purchased at a price of 16.51 pence per share that was determined based upon the previous 60-day weighted average stock price and was intended to approximate fair value.

The Company has an agreement, at its option, to contract with Torotrak for engineering services in support of this project. The engineering agreement is considered insignificant as the amount spent to date is less than \$2.0 million dollars.

The Company received no rights of control or other rights related to the purchase of Torotrak shares. The company has no representation on the board of directors and has no right to set policy or any influence over the day to day operations of Torotrak.

The investment is accounted for as an available-for-sale security. Any change in fair value of the shares is recorded in Other Comprehensive Income. This agreement was not filed as an exhibit to the Registration Statement as such agreement is not material to the Company's business.

59. *It appears, from various news releases, that you acquired 10% of Torotrak as a "strategic investment" and that the purchase made you the largest shareholder. We note a quote from Torotrak's CEO, upon the signing of the agreement that "This is the most*

significant endorsement of our technology thus far . . .” The CEO also described the agreement as a major coup at a difficult time for manufacturers and component suppliers. In view of these factors and the shared technological endeavors, please tell us why you do not account for the investment in Torotrak using the equity method of accounting. Address each of the criteria set forth in ASC 323-10-15-6 in your response.

Response: Determining whether an investor has the ability to exert significant influence is a matter of judgment and depends on an evaluation of all relevant facts and circumstances, including the level of the ownership interest and for example, representation on the board of directors of the investee. In order to determine if the Company should apply the equity method of accounting to our investment in Torotrak, a company that has been in existence since 1988, the Company considered its ownership percentage as well as the criteria set forth in ASC 323-10-15-6. At the Staff’s request, the Company has provided its observations on each of the criteria set forth in ASC 323-10-15-6 below.

a. Representation on the board of directors

The board of directors of Torotrak comprises a non-executive chairman, three executive directors and two non-executive directors. The Company has no representation on or ability to influence the selection of Torotrak’s board of directors. The board has reserved specific responsibilities to itself including:

- Setting strategy and approving annual budgets
- Reviewing financial and operational performance
- Approving policies for controls and risk management
- Approving major capital expenditures, disposals and major business developments
- Reviewing the health & safety policy and performance of the Company
- Approving appointments to the Board and the position of Company Secretary
- Approving policies relating to directors’ remuneration and the severance of directors’ contracts

b. Participation in policy-making processes

The board of directors and management of Torotrak are responsible for the policy-making processes of Torotrak. The Company does not participate in any Torotrak policy-making processes.

c. Material intra-entity transactions

During its fiscal year ended March 31, 2010 and six-month period ended September 30, 2010; Torotrak derived 82% and 58% of its revenue from the Company, respectively. All of the activities between the two parties are transacted at arm’s length. Moreover, the Company notes Torotrak has publicly disclosed in its 2010 Annual Report that it has other licensees and expects to and does currently generate revenue from other customers. On page 10 of its 2010 Annual Report, Torotrak states that “We have secured a number of key licensees who have committed to

material programmes with Torotrak...”. Torotrak’s technology can be incorporated into different platforms for other customers. While Torotrak derived a substantial portion of its recent total revenue from the Company, the Company does not believe that the revenue derived by Torotrak from the Company results in our ability to exercise significant influence over Torotrak.

d. Interchange of managerial personnel

The Company does not have any ability to appoint Torotrak’s managerial personnel. Also, there is no sharing or interchange of managerial personnel between the Company and Torotrak.

e. Technological dependency

Torotrak is not technologically dependent on the Company. Torotrak has its own technology and engineers.

f. Extent of ownership by an investor in relation to the concentration of other shareholdings

According to Torotrak’s website, the companies detailed in the table below own substantial shareholdings in Torotrak:

<u>Company name</u>	<u>Shares</u>	<u>Percentage</u>
Allison Transmission, Inc.	14,608,290	9.03
Barclays Group plc	14,410,510	8.91
L R Nominees Limited	11,202,665	6.93
Majedie Asset Management Limited	8,989,200	5.56
TD Waterhouse Nominees (Europe) Limited	8,541,211	5.28

The Company’s ownership percentage is well below the 20% “rebuttable presumption of significant influence” threshold (ASC 323-10-15-8). As noted above, there are a number of other significant shareholders with substantial share ownership in Torotrak.

After evaluating all considerations noted above, the Company has concluded that it does not have the ability to exercise significant influence over the operating and financial policies of Torotrak, and therefore, should not apply the equity method of accounting.

Note 8 — Derivatives, page F-25

60. Please explain why collateral qualifies as a current asset. Also, please tell us how the amount of the additional collateral of \$41.9 million was determined at December 31,

2010. Describe, in expanded detail, how LIBOR levels can and/or have impacted collateral requirements.

Response: As stated in our response to Comment 49, the Company is required to post \$2.0 million independent collateral for the entire duration of the arrangement; accordingly, the Company has classified this amount as a non-current asset. The Company is also required to post additional collateral beyond our independent collateral requirement as the LIBOR interest rate curve shifts downward. The Company's additional collateral posting requirement generally increases when the LIBOR interest rate curve shifts downward. Conversely, the Company's additional collateral posting requirement generally decreases when the LIBOR interest rate curve shifts upward and the applicable amount of posted collateral is returned to the Company.

The Company has classified the additional collateral amount of \$41.9 million as of December 31, 2010, as a current asset because the balance is subject to change on a daily basis based on the collateral posting requirements and could potentially reverse entirely in the short term depending on the movement in the LIBOR interest rate curve. As of March 31, 2011, the collateral balance has decreased by \$3.6 million from December 31, 2010.

Note 9 — Product Warranty Liabilities, page F-25

61. We note from your disclosure on page 11-5 that you believe you have satisfied Rule 12-09 of Regulation S-X related to valuation and qualifying accounts through footnote disclosure and therefore have not presented separate schedules. Your table here appears to present the information required for two fiscal years. Please note that Rule 5-04 of Regulation S-X requires such information for each year an income statement is presented. As such, please revise your table to include the roll forward for fiscal 2008, and ensure other footnotes that are meant to satisfy Rule 12-09, such as the roll forward of the valuation allowance presented on page F-38, include information for each period an income statement is presented.

Response: The Company has revised the disclosure on pages F-25 and F-38 to include the roll forward of our warranty reserve and tax valuation allowance account for fiscal year 2008.

62. Please tell us how, during a period of increased net sales, warranties issued during the period decreased significantly.

Response: The Company respectfully submits that the decrease in new warranties issued during 2010 was primarily driven by the end of the extended coverage program for new Dual Power Inverter Module ("DPIM") units. The Company ceased offering the DPIM extended coverage program in November 2009 when it started shipping a reengineered DPIM unit. New DPIM units shipped and sold in 2010 were not covered by the extended coverage program. The increase in the warranty liability related to the extended coverage programs for DPIM units in 2010 and 2009 was \$0.0 million and \$34.2 million, respectively.

63. Please revise your disclosure here to indicate the material components of "Net adjustments to liability." We assume that the \$22.7 million reduction in DIPM liability is

included in the \$35.5 million reduction. If our understanding is not correct, please also tell us where the \$22.7 million reduction has been considered.

Response: The Company has revised the disclosure on page F-25 to indicate the material components of the Net adjustments to liability of \$35.5 million. The DPIM adjustment (\$22.7 million) as noted on page F-25 is part of the \$35.5 million net adjustment to liability. The remaining \$12.8 million represents adjustments to the liability resulting from improved warranty claims data and field experience across multiple product platforms.

64. *As a related matter, please tell us how the \$22.7 million discussed here relates to the \$11.4 million elimination discussed under “Selling, general, and administrative expenses” on page 49.*

Response: The Company notes the Staff’s comment regarding the \$22.7 million discussed in product warranty liabilities and how it relates to the \$11.4 million elimination discussed under Selling, general and administrative expenses on page 49. Below is the Company’s discussion of the relationship between the two amounts.

The \$22.7 million reduction in warranty reserve in 2010 was a result of a change in the Company’s estimated historical liability rates associated with the extended special coverage for the DPIM. This change in estimate resulted from the Company’s ongoing analysis of the underlying warranty claims activity and the improvement in the claims data associated with DPIM product failures. The favorability associated with this change in estimate was substantially offset by a reduction in the associated receivable from General Motors (“GM”) as per the 2007 Asset Purchase Agreement.

The \$11.4 million reduction identified in the selling, general and administrative expense comparison between years 2010 and 2009 results from the elimination of the Company’s one-third share of the 2009 DPIM special coverage expense associated with product shipments during 2009 with the other two-thirds or \$22.8 million being charged to GM. As stated in the Company’s response to Comment 63, following 2009, the Company no longer offered the extended special coverage on DPIM.

Note 10 — Other Income, net, page F-26

65. *We note from your disclosure here and from your policy note on page F-9 that you have recognized \$13.8 million expense reimbursements under the cost-share grant program funded by the American Recovery and Reinvestment Act for the development of hybrid- propulsion system manufacturing capacity in the U.S. as Other Income since inception of the program. Please tell us how you determined the amount to be recognized and why you recorded the amount as non-operating income.*

Response: The Company notes the Staff’s comments regarding the Department of Energy grant and has added additional comments below to clarify how the Company determines the amount to be recognized and the rationale for recording the amounts in other income, net.

The grant received from the Department of Energy for the development and manufacture of hybrid propulsion systems was for \$62.8 million. The grant was established to fund, on a 50/50 cost sharing basis, expenditures for engineering development and investments in manufacturing processes and facilities to manufacture hybrid propulsion systems in the United States. Costs covered under the grant include engineering development work on the hybrid propulsion systems, manufacturing engineering work related to establishing applicable manufacturing processes and expenditures related to manufacturing equipment and facilities for the production of hybrid propulsion systems. Amounts earned for the allowable expenses incurred are credited to other income, net while amounts earned for capital expenditures are credited against the gross basis of the capital asset.

The Company was unable to identify applicable US GAAP guidance for accounting for government grants. In absence of targeted guidance under US GAAP, the Company referenced the guidance under the International Financial Reporting Standards ("IFRS") to determine and support our accounting conclusions. IAS 20 Accounting for Government Grants and Disclosure of Government Assistance provides guidance on recognizing, measuring and disclosing government grants and disclosing other forms of government assistance. The guidance provides for the classification of grant monies received as either an operating expense offsetting expenses incurred or other income, net.

It is the Company's belief that recording grant proceeds in other income, net provides the reader a robust understanding of costs required by the company to develop future new product programs that may not receive grant funding, as well as recognizes that grant income is not expected to be a normal or recurring part of the Company's operating income.

66. *As a related matter, please revise your discussion of the Grant Program to indicate the total availability under such program, and how allowable expenses are determined.*

Response: The Company has revised the disclosure on page F-26 to identify the amount (\$62.8 million) of the grant that was awarded under the program and the process for determining allowable expenses.

Note 14 — Income Taxes, page F-45

67. *Please reconcile the valuation allowance provision of \$24.1 million as listed in your rate reconciliation with the \$35.4 million in additions to the valuation allowance as listed in the table on page F-38.*

Response: The Company respectfully submits that the difference between the valuation allowance provision of \$24.1 million as listed in the Company's rate reconciliation and the \$35.4 million in additions to the valuation allowance as listed in the table on page F-38 is the amount of valuation allowance provision attributable to items recorded in other comprehensive income, which do not impact the Company's rate reconciliation.

Item 16. Exhibits and Financial Statement Schedules

68. We note that you are required to file finalized opinions of counsel. In this regard, please revise to remove the term "Form of" from the description of the legal opinion. Please also be advised that the opinion should be dated and filed reasonably close to the date of effectiveness.

Response: The Company has revised the disclosure accordingly, and notes the Staff's comments and will file, in a subsequent amendment, a finalized opinion of counsel dated as of date reasonably close to the date of effectiveness.

69. Please refile your Credit Agreement to include all schedules and exhibits. Please also file Attachment A to the Copyright Security Agreement.

Response: The Company has refiled herewith the Credit Agreement to include all schedules and exhibits not previously filed, including Attachment A to the Copyright Security Agreement.

We hope that the foregoing has been responsive to the Staff's comments and look forward to resolving any outstanding issues as quickly as possible. Please do not hesitate to contact me at (202) 637-2139 or my colleague, Jason M. Licht, at (202) 637-2258 with any questions or further comments you may have regarding this filing or if you wish to discuss the above.

Sincerely,

/s/ Rachel W. Sheridan

Rachel W. Sheridan
of LATHAM & WATKINS LLP

Enclosures

cc: (via fax)

Eric C. Scroggins
Chanda DeLong