CONFIDENTIAL TREATMENT REQUESTED BY ALTAIR ENGINEERING INC.

Selim Day Partner

1251 Avenue of the Americas New York, New York 10020

T: 212.419.5861 F: 973.422.6819 E: sday@lowenstein.com

CERTAIN PORTIONS OF THIS LETTER AS FILED VIA EDGAR HAVE BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS. OMITTED INFORMATION HAS BEEN REPLACED IN THIS LETTER AS FILED VIA EDGAR WITH A PLACEHOLDER IDENTIFIED BY THE MARK "[****]." THE OMITTED PORTIONS ARE BRACKETED IN THE UNREDACTED PAPER SUBMISSION FOR EASE OF IDENTIFICATION.

October 5, 2017

VIA EDGAR AND FEDEX

United States Securities and Exchange Commission Division of Corporation Finance Mail Stop 4720 100 F Street, N.E. Washington, D.C. 20549

Attn: Barbara C. Jacobs

Mitchell Austin Frank Knapp Christine Dietz

Re: Altair Engineering Inc.

Registration Statement on Form S-1

File No. 333-220710

Dear Ladies and Gentlemen:

We are submitting this letter on behalf of Altair Engineering Inc. (the "Company") in connection with the review by the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") of the Company's Registration Statement on Form S-1 (File No. 333-220710) (the "Registration Statement") that was filed with the Commission on September 29, 2017. Because of the commercially sensitive nature of information contained herein, this submission is accompanied by the Company's request for confidential treatment for the bracketed portions of this letter pursuant to Rule 83 of the Commission's Rules on Information and Requests, 17 C.F.R. §200.83, and the Freedom of Information Act ("FOIA") and the Company has submitted a separate request to the Commission's Office of FOIA.

The purpose of this letter is to inform the Staff on a supplemental basis that, based on current market conditions, the price range to be included on the cover of the Company's preliminary prospectus is expected to be within a range of \$[****]^1 to \$[****]^2 per share. The price range does not take into account the current lack of liquidity for the Company's Class A Common Stock and assumes a successful initial public offering ("IPO") with no weighting attributed to any other outcome for the Company's business, such as remaining a privately held company or being sold in an acquisition transaction.

^{1 [****] –} Confidential Treatment Requested by Altair Engineering Inc.

² [****] – Confidential Treatment Requested by Altair Engineering Inc.

CONFIDENTIAL TREATMENT REQUESTED BY ALTAIR ENGINEERING INC.

Securities and Exchange Commission

Page 2

The price range above was determined by, in large part, discussions among the senior management of the Company and representatives of J.P. Morgan Securities LLC and RBC Capital Markets, LLC, the representatives of the underwriters for the offering. In addition, the price range was derived using a combination of valuation methodologies, including (i) a comparison of public companies at a similar stage of development, (ii) a comparison of valuations for comparable issuers in the Company's industry, at the time of their IPO, (iii) the Company's financial condition and prospects, (iv) recent performance of IPOs of companies in the Company's sector, (v) a current analysis of the public equity market by the underwriters for the offering, and (vi) the Company's third-party valuations.

Background to Option Grants

Prior to April 3, 2017, the Company had two classes of common stock, Class A common stock ("Old Class A Common Stock") with one vote per share and Class B non-voting common stock ("Old Class B Common Stock"). All option grants prior to April 2017 were option grants for Old Class B Common Stock. On April 3, 2017, the Company completed a recapitalization of its capital stock by filing a certificate of amendment to its articles of incorporation pursuant to which (i) each share of Old Class A Common Stock converted into one share of newly authorized Class B common stock entitled to 10 votes per share ("New Class B Common Stock"), and (ii) each share of Old Class B Common Stock converted into one share of newly authorized Class A common stock entitled to one vote per share ("New Class A Common Stock" or "Class A Common Stock"). All stock options granted by the Company are options to acquire the Company's New Class A Common Stock. In October 2017, the Company completed a four for one stock split. The discussion in this letter takes into account the four for one stock split.

Stock Option Grants by the Company since January 1, 2016

On July 24, 2017, in response to prior comment 16 from the Staff's letter dated July 13, 2017, the Company provided the Staff with supplemental information regarding stock options granted during fiscal 2016 and to date in fiscal 2017, as set forth below:

	Number		Common
	of Options	Exercise Price Per	Stock Fair Value
Stock Option Grant Date	Granted	Share	Per Share
May 17, 2016	95,952	\$ 3.64	\$ 3.64
November 23, 2016	40,000	4.52	4.52
June 9, 2017	608,948	5.18	5.18

Since June 9, 2017, the Company has not granted any additional stock options.

CONFIDENTIAL TREATMENT REQUESTED BY ALTAIR ENGINEERING INC. Securities and Exchange Commission

Page 3

Previously Provided Information

The section captioned "Stock-Based Compensation" at pages 93-94 in the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of the Registration Statement includes a detailed explanation of the Company's approach to accounting for stock-based compensation.

Stock Option Grants

May 17, 2016 and November 23, 2016 Grants

As of May 17, 2016, the board of directors determined the fair value of the Class A Common Stock of the Company to be \$3.64 per share. The board of directors based its determination on several factors including a third-party valuation report as of December 31, 2015 (the "December Valuation Report"). The December Valuation Report used the income approach (discounted cash flow, or DCF) on both a Gordon Growth and Exit Multiple basis and a market approach (guideline public company method, or GPC Method).

As of November 23, 2016, the board of directors determined the fair value of the Class A Common Stock of the Company to be \$4.52 per share. The board of directors based its determination on several factors including a third-party valuation report as of September 30, 2016 (the "September Valuation Report"). The September Valuation Report used the same methodology as the December Valuation Report except the valuation firm added an additional market based criteria (comparable transactions).

As noted above, the Class A Common Stock, prior to April 2017, was non-voting. Accordingly, the valuation of the Class A Common Stock took into account the lack of equal voting rights to the voting common stock in addition to a lack of liquidity.

June 9, 2017 Grants

As of June 9, 2017, the board of directors determined the fair value of the Class A Common Stock of the Company to be \$5.18 per share. The board of directors based its determination on several factors including a third-party valuation report as of April 30, 2017 (the "April Valuation Report").

The April Valuation Report put minimum weight on an IPO liquidity event in 2017, as a date for the confidential submission of the registration statement with the Commission had not been determined by April 30, 2017 (the date of the April Valuation Report). Absent such filing and absent the receipt of comments from the Commission, the Company had no visibility as to whether an IPO could be completed in 2017. In addition, other factors, including the Company continuing as a stand alone private entity and consummating a liquidity event, such as a sale or an IPO, that might not occur until a more distant time in the future beyond 2017, were given significant weight.

The Company obtained a third-party valuation report as of June 30, 2017 (the "June Valuation Report"). The June Valuation Report considered related factors in altering the valuation assumptions between the April Valuation Report and the June Valuation Report and began giving weight to an IPO as a liquidity event. The June Valuation Report increased the Company's valuation to \$7.14 per share (after giving effect to the four for one stock split) for the following reasons. First, the Company had submitted a draft registration statement on Form S-1 to the Commission anticipating an IPO within six to nine months from the June Valuation Date. Second, the Commission had sent its comment letter relating to such filing to the Company and the Company did not believe any of the comments would hinder the IPO process. Third, there was an assumption that the public filing of the Company's registration statement in the future might also attract a potential buyer for a strategic sale transaction. Fourth, the macro- and micro- economic factors governing the economy and industry remained stable, as did the overall market for IPOs. However, given that the IPO was not assured and additional significant steps needed to be completed, including having the underwriters provide a formal offering price range as well as the successful completion of the "testing the waters" and "roadshow" processes, the completion of an IPO was neither the only factor nor a primary factor in determining a valuation. The Company believes it appropriately relied on the April Valuation Report for the following reasons. First, the June 9, 2017 option grants were made prior to the confidential submission of the registration statement on Form S-1 with the Commission. Second, absent such filing and absent the receipt of comments from the Commission, the Company had no visibility as to whether an IPO could be completed in 2017.

CONFIDENTIAL TREATMENT REQUESTED BY ALTAIR ENGINEERING INC.

Securities and Exchange Commission

Page 4

The Company believes the difference between [****],³ the midpoint of the estimated price range, and \$5.18, the determined fair value of the Company's Class A Common Stock, per share, as of June 9, 2017, is the result of the following factors:

- The June Valuation Report increased the valuation of the Class A Common Stock to \$7.14 per share, as compared to the April Valuation Report for the reasons described above.
- The completion of a liquidity event in the form of an IPO moved from being an insignificant in the June Valuation Report to a significant factor.
- The estimated price range necessarily assumes that the IPO has occurred and a public market for the Company's Class A Common Stock has been created and therefore excludes any marketability or illiquidity discount for the Company's Class A Common Stock, which was appropriately taken into account in the determination of the fair value of the Class A Common Stock as of June 9, 2017 due to the possibility that the Company would not complete an IPO. Conversely, the fair market value utilized in the third-party valuations assumes some possibility that a result besides an IPO is a realistic possibility.
- Differences in the valuation determined by the underwriters in their valuation analysis discussed with the Company compared to the valuation methodologies of third-party valuations considered by the board of directors.

The Company believes the factors noted above were the primary factors, but other reasons for the difference between the midpoint of the estimated price range and the determined fair value of the Company's Class A Common Stock per share as of June 9, 2017 include:

- The April Valuation Report utilized a quantitative methodology to determine the fair value of the Company's Class A Common Stock, which may differ from the more qualitative and subjective methodology used by some public market investors to determine the price they are willing to pay in an IPO.
- The Company's consideration of various objective and subjective factors in the previous fair value determinations, as described above, that were not applicable to the current estimated IPO price range.

The Company will set forth a bona fide offering price range consistent with Commission guidance in a pre-effective amendment to the Registration Statement prior to the distribution of any preliminary prospectus and commencement of the Company's road show process. The bona fide offering price range will be narrower than, but is expected to be within, the price range stated above, and the parameters of that price range will be subject to then-current market conditions, continuing discussions with the underwriters, as well as further business, market and other developments affecting the Company.

³ [****] – Confidential Treatment Requested by Altair Engineering Inc.

CONFIDENTIAL TREATMENT REQUESTED BY ALTAIR ENGINEERING INC. Securities and Exchange Commission Page 5

We hereby further request, pursuant to Rule 418(b) under the Securities Act of 1933, as amended, the return of the unredacted version of this letter. The Company believes that the return of the supplemental information contained in this letter will protect the interests of investors and is consistent with the provisions of FOIA by maintaining in confidence the potential valuation of the Company that may, if disseminated, negatively impact the trading in the Class A Common Stock of the Company following the IPO. The Company advises the Staff that it has not filed the supplemental information subject to this request in electronic format. We have provided a self-addressed envelope for this purpose. Please return this letter to the Company, in care of the undersigned, a responsible representative of the Company. Any questions regarding the contents of this letter should be addressed to the undersigned at (212) 419-5861.

Very truly yours,

/s/ Selim Day

Selim Day

cc: James Scapa, Chief Executive Officer Howard Morof, Chief Financial Officer **Altair Engineering Inc.**

Elizabeth Mandle, Esq. **Lowenstein Sandler LLP**

William Schnoor Jr., Esq. Edwin O'Connor, Esq. **Goodwin Procter LLP**