Morgan Stanley & Co. LLC 1585 Broadway New York, New York 10036

J.P. Morgan Securities LLC 383 Madison Avenue New York, New York 10179

Allen & Company LLC 711 Fifth Avenue New York, New York 10022

June 11, 2024

VIA EDGAR

Re: Tempus AI, Inc. Acceleration Request for Registration Statement on Form S-1 Registration File No. 333-279558

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attn: Jan Woo, Kyle Wiley, Robert Littlepage, Claire DeLabar

Ladies and Gentlemen:

In accordance with Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended (the "Act"), we, as representatives of the several underwriters, hereby join in the request of Tempus AI, Inc. (the "Company") that the effective date of the above-referenced Registration Statement be accelerated so that it becomes effective at 4:00 p.m. Eastern Time on June 13, 2024, or as soon thereafter as practicable, or at such other time thereafter as the Company or its outside counsel, Cooley LLP, may request by telephone to the staff of the Securities and Exchange Commission.

Pursuant to Rule 460 under the Act, we, as representatives of the several underwriters, wish to advise you that there will be distributed to each underwriter or dealer, who is reasonably anticipated to participate in the distribution of securities, as many copies of the preliminary prospectus as appears to be reasonable to secure adequate distribution of the preliminary prospectus.

Each of the undersigned, each a representative of the several underwriters, advises that it has complied and will continue to comply, and we have been informed by the other participating underwriters that they have complied and will comply, with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

Very truly yours,

MORGAN STANLEY & CO. LLC J.P. MORGAN SECURITIES LLC ALLEN & COMPANY LLC

Acting severally on behalf of themselves and the several Underwriters

MORGAN STANLEY & CO. LLC

/s/ Eduardo I. Herdan

By: Eduardo I. Herdan Title: Vice President

J.P. MORGAN SECURITIES LLC

/s/ Peter Castoro By: Peter Castoro Title: Executive Director

ALLEN & COMPANY LLC

/s/ Peter DiIorio

By: Peter Dilorio Title: General Counsel