

March 4, 2025

Jim Rogers
Chief Financial Officer
Tempus AI, Inc.
600 West Chicago Avenue, Suite 510
Chicago, IL 60654

Re: Tempus AI, Inc.
Registration Statement on Form S-1
Filed February 25, 2025
File No. 333-285186

Dear Jim Rogers:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Uwem Bassey at 202-551-3433 or Matthew Derby at 202-551-3334 with any questions.

Sincerely,

Division of

Office of Technology

Corporation Finance

cc: Christina T. Roupas