January 4, 2023 Nimesh Patel Chief Executive Officer AMCI Acquisition Corp. II 600 Steamboat Road Greenwich, Connecticut 06830 Re: AMCI Acquisition Corp. II Amendment No. 5 to Registration Statement on Form S-4 Filed January 3, 2023 File No. 333-264811 Dear Nimesh Patel: We have reviewed your amended registration statement and have the following comment. Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response. After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments. Amendment No. 5 to Registration Statement on Form S-4 U.S. Federal Income Tax Considerations, page 297 1. Please revise your disclosure in this section to: (1) clearly state that the tax disclosure in this section is the opinion of White & Case LLP and/or Covington & Burling LLP, and; (2) clearly identify and articulate the opinions being rendered. Refer to sections III.B.2 and III.C.1 of CF Staff Legal Bulletin No. 19. Nimesh Patel AMCI Acquisition Corp. II January 4, 2023 Page 2 You may contact Kristin Lochhead at 202-551-3664 or Daniel Gordon at 202-551-3486 if you have questions regarding comments on the financial statements and related matters. Please contact Dillon Hagius at 202-551-7967 or Laura Crotty at 202-551-7614 with any other questions. Sincerely,

FirstName LastNameNimesh Patel Division of Corporation Finance Office of Industrial Applications and Comapany NameAMCI Acquisition Corp. II January 4, 2023 Page 2 cc: Elliott Smith FirstName LastName