



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

October 14, 2022

Alan Baratz
President & Chief Executive Officer
D-Wave Quantum Inc.
3033 Beta Avenue
Burnaby, British Columbia V5G 4M9
Canada

**Re: D-Wave Quantum Inc.
Amendment No. 1 to
Registration Statement on Form S-1
Filed September 27, 2022
File No. 333-267126**

Dear Alan Baratz:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply 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 these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our September 15, 2022 letter.

Amendment No. 1 to Registration Statement on Form S-1 Filed on September 27, 2022

Lincoln Park Transaction, page 4

1. Please define the term "Accelerated Purchase Share Amount."

Risk Factors

Risks Related to the Offering, page 20

2. We note your response to prior comment 8. Please advise whether the potential depressive effect on your shares may be increased by the fact that sales to Lincoln Park

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will occur at prices below the then current trading price of your common stock pursuant to the discounted price formula provided in the Purchase Agreement and revise as appropriate.

D-Wave Systems Inc.'s Management's Discussion and Analysis of Financial Condition and Results of Operations
Liquidity and Capital Resources, page 104

3. We note your response to prior comment 10 and revised disclosure on page 107 stating that "As previously disclosed, with respect to certain key metrics, including revenue, we do not anticipate meeting the Transaction Forecasts due to a variety of factors. . .". Your revisions suggest you are incorporating previously disclosed information by reference, but you are not eligible to do so. Refer to the Staff Statement on Select Issues Pertaining to Special Purpose Acquisition Companies published by the Division of Corporation Finance on March 31, 2021. Please revise to include in your registration statement the information and key metrics described as previously disclosed.

General

4. We note your response to prior comment 4 and that pursuant to your side letter agreement with the Public Sector Pension Investment Board ("PSP"), PSP will vote its shares in favor of the election of the directors that are nominated by the Company's board or a duly authorized committee. It appears that by virtue of this agreement your board will effectively control the nomination and voting power for the election of directors. Please provide us your legal analysis as to why you are not a "Controlled Company" pursuant to NYSE listing rules under this arrangement. Specifically, address whether 50% of the voting power for the election of directors is held by a "group."

Please contact Patrick Faller, Staff Attorney, at (202) 551-4438 or Jan Woo, Legal Branch Chief, at (202) 551-3453 with any questions.

Sincerely,

Division of Corporation Finance
Office of Technology

cc: Adam M. Givertz