



DIVISION OF
CORPORATION FINANCE

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

April 15, 2022

Emil Michael
President
D-Wave Quantum Inc.
3033 Beta Avenue
Burnaby, British Columbia V5G 4M9
Canada

**Re: D-Wave Quantum Inc.
Registration Statement on Form S-4
Filed March 15, 2022
File No. 333-263573**

Dear Mr. Michael:

We have reviewed your 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.

Registration Statement on Form S-4

Q: What will happen in the Transaction?, page 3

1. Advise if the number of shares being converted and exchanged as a product of the Exchange Ratio will be rounded to the nearest whole number of shares.

Q: What equity stake will the current equityholders of DPCM and D-Wave hold in D-Wave Quantum..., page 6

2. We note your presentation of the sponsor's ownership interest does not include the Earn-out shares. Please revise here or separately disclose the sponsor and its affiliates' total potential ownership interest in the combined company, assuming exercise and conversion of all securities, including the Earn-out shares.

Q: What interests does the Sponsor and DPCM's officers and directors have in the Transaction?, page 9

3. Please quantify the aggregate dollar amount and describe the nature of what the sponsor and its affiliates have at risk that depends on completion of a business combination. Include the current value of securities held, loans extended, fees due, and out-of-pocket expenses for which the sponsor and its affiliates are awaiting reimbursement. Provide similar disclosure for the company's officers and directors, if material.

PIPE Subscription Agreements, page 24

4. Please highlight any material differences in the terms and price of securities issued at the time of the IPO as compared to private placements contemplated at the time of the business combination. We note your disclosure that DPCM's CEO has entered into a PIPE Subscription Agreement. Disclose if any other of DPCM's sponsors, directors, officers or their affiliates intend to participate in a private placement at Closing.

Transaction Support Agreement, page 25

5. We note that DPCM and D-Wave entered into a Transaction Support Agreement whereby D-Wave shareholders agreed to support and vote in favor of the Transaction. Advise whether the Transaction Support Agreement involves only executive officers, directors, affiliates, founders and their family members, and holders of 5% or more of the voting equity securities of D-Wave and that the persons signing the agreements collectively own less than 100% of the voting equity of D-Wave. Refer to Securities Act Sections Compliance and Disclosure Interpretation 239.13 for further guidance.

Industry and Market Data, page 42

6. You state that the accuracy and completeness of information included in your disclosure from certain third party publications "is not guaranteed." As this statement may imply an inappropriate disclaimer of responsibility with respect to the third party information, please either delete this statement or specifically state that you are liable for such information.

Risk Factors

Our business and growth are dependent on the success of our strategic relationships with third parties, page 48

7. We note your disclosure that D-Wave's business is dependent on certain third-party suppliers and that you have attached certain pilot line and semiconductor line operation agreements to your registration statement. Please disclose the key terms of these agreements in your registration statement and file any other agreements upon which D-Wave's business is substantially dependent. Refer to Item 601(10)(ii)(B) of Regulation S-

K.

Our business model includes a relatively new four-phase engagement model..., page 50

8. We note your disclosure on page 50 about your new four-phase engagement business model. Please advise how this relates to D-Wave's three-pronged go-to-market model and disclose relevant details about its four-phase engagement model. You state that if your technology does not drive continued progression of customers through the four phases, then the result could have a material adverse effect on your business, financial condition or results of operations.

Unfavorable conditions in our industry or the global economy, including uncertain geopolitical conditions..., page 60

9. Disclose the risk of potential cyberattacks by state actors as a result of Russia's invasion of the Ukraine and whether you have taken actions to mitigate such potential cyberattacks.

We have identified a material weakness in our internal control over financial reporting. If we fail to remedy this weakness..., page 69

10. We note that you have identified a material weakness in your internal control over financial reporting and have implemented remedial measures. Please disclose how long you estimate it will take to complete your remediation plans and any associated material costs that you have incurred or expect to incur.

Risks Related to DPCM, D-Wave Quantum and the Transaction, page 71

11. Please highlight the risk that the sponsor will benefit from the completion of a business combination and may be incentivized to complete an acquisition of a less favorable target company or on terms less favorable to shareholders rather than liquidate.

Each of DPCM and D-Wave have incurred and will incur substantial costs in connection with the Transaction and related transactions..., page 80

12. Provide an estimate of the aggregate transaction expenses that DPCM and D-Wave expect to incur in connection with the Transaction.

D-Wave Quantum may redeem your unexpired Public Warrants prior to their exercise at a time that is disadvantageous to you..., page 89

13. Clarify whether recent common stock trading prices exceed the threshold that would allow the company to redeem public warrants. Clearly explain the steps, if any, the company will take to notify all shareholders, including beneficial owners, regarding when the warrants become eligible for redemption.

Potential Purchases of Public Shares and/or Warrants, page 105

14. We note your disclosure that you may grant put options or other agreements to protect investors or holders against potential loss in the value of their shares. Revise your risk factors to discuss the risks that these agreements may pose to other holders if you are required to buy back the shares of your common stock or provide other downside protection. For example, discuss how such forced purchases would impact the cash you have available for other purposes and the execution of your business strategy. Please clarify whether you intend to circulate a new or amended proxy statement/prospectus if such agreements are entered into prior to the Special Meeting in addition to the Current Report on Form 8-K your disclosure indicates you would file. Further, advise if you anticipate entering into such transactions after the Special Meeting and before Closing of the Transaction and, if so, your view on why this information would not need to be shared with DPCM's public stockholders prior to their vote on the Transaction.

Unaudited Pro Forma Combined Balance Sheet, page 147

15. Please include a subtotal column to reflect D-Wave on a pro forma basis to give effect to the Material Event, before giving effect to the merger with DPCM Capital, Inc.

Information about D-Wave, page 175

16. To the extent material, provide a breakdown of the revenue D-Wave generates from each of its product types or services, including from QCaaS and professional services. Balance this presentation with disclosure of its net losses for the periods presented in the financial statements.

Our Quantum Computers, Developer Tools and Quantum Hybrid Solvers Delivered via QCaaS, page 177

17. We note your disclosure here that you are planning to provide a multilayer fabrication stack to deliver gate-based quantum computing. To help investors understand your product plans, clarify your use of the term multilayer fabrication stack. Additionally, disclose how you intend to deliver this product, whether as physical hardware to customers or if the gate-based quantum computing will be provided through your cloud service or other means.

Customers and Applications, page 178

18. We note your disclosure that D-Wave had three significant customers in 2021. Please disclose the materials terms of your agreements with these customers, including but not limited to, the term and termination provisions of the agreement and the identity of the customers.

Our Business Model, page 182

19. Please revise to more fully explain your free trial service for Leap, including restrictions and time frames associated with the free trial. Please also provide investors with metrics, where possible, to give more context about the scope of your direct sales, partner and developer strategies. For example, consider quantifying historical revenues from direct sales compared to re-sellers.

Expansion into gate-model, page 187

20. Please revise to include key details from your "Clarity" product roadmap that you reference on page 189 to the extent this roadmap includes material information about the timing and development of your gate-model hardware. We also note your disclosure on page 47 that D-Wave's growth is dependent on scaling up manufacturing of its products and constructing quantum computing technology. Provide an overview of your business plan to build this capacity.

Key Strategic Relationships, page 188

21. We note your disclosure of several key relationships and the entry by D-Wave into investment and resale agreements with NEC and a contract with Lockheed. Please revise your disclosure to describe the key terms of any material agreements, including the term and termination provisions, and for any other contracts upon which D-Wave's business is substantially dependent. File a copy of any such agreement as an exhibit to your registration statement. Refer to Item 601(b)(10) of Regulation S-K.

D-Wave Management's Discussion and Analysis of Financial Condition and Results of Operations, page 192

22. Please tell us whether management uses any key metrics to monitor or evaluate the key factors that affect D-Wave's performance or manage its business. If so, please tell us your consideration of disclosing these measures for each of the periods presented. Refer to SEC Release No. 33-10751.

Management of D-Wave Quantum, page 217

23. Please revise to include specific dates of service for the past and present occupations held for each of your executive officers and directors during the past five years. Refer to Item 401(e) of Regulation S-K.

Beneficial Ownership of Securities, page 248

24. Please disclose the natural person(s) with dispositive and voting power over shares held by the Public Sector Pension Investment Board.

Background of the Transaction, page 263

25. When you refer to representatives of D-Wave, DPCM, the sponsor, or the DPCM board, identify any executive officers or board members that were present or are referenced, or confirm that you mean all members of the board or executive officers, as applicable. In addition, please expand the description of the transaction timeline to include any relevant disclosure to address:
- whether the sponsor and management and affiliates have a track record with SPACs and, if so, balanced disclosure about this record and the outcomes of the prior transactions;
 - whether the sponsor has other SPACs in the process of searching for a target company and whether the sponsor considered more than one active SPAC to be the potential acquirer and how the final decision was reached;
 - the negotiation of any arrangements for any shareholder to waive its redemption rights;
 - the underlying reason why the Earn-out shares and shares subject to forfeiture by the sponsor were negotiated;
 - any discussions relating to the assumptions underlying the financial projections provided by D-Wave; and
 - any discussions involving continuing employment or involvement for any persons affiliated with DPCM before the merger, any formal or informal commitment to retain any of the financial advisors after the merger, and any pre-existing relationships between DPCM (or individuals affiliated with DPCM) and additional investors.

Certain Projected Financial Information, page 270

26. Tell us why you believe D-Wave has sufficient engagement with customers and a reasonable basis to project revenue through 2026 given your disclosure of risks associated with its status as an early-stage company and the developing market for quantum computers. Quantify any other material assumptions described as used in preparing the projections, such as the number of quantum-accelerated applications developed by customers, product offerings, and length of the sales cycle, among others. Clarify if the projections account for D-Wave's development of a gate-model quantum computing system.

Financial Projections, page 273

27. Please revise your table to provide additional financial operating data to balance the information provided. For example, please disclose the amount of Research and Development expense and related headcount for each period presented. Please clarify the extent to which your projections assume continued government assistance and the basis for those assumptions.

28. You disclose on page 271 that your assumptions presume that revenue from QCaaS will increase from 45% of total revenue in 2022 to 95% of total revenue in 2026. Please explain the basis for your revenue growth assumptions both in total and by product/service. Please also revise your table on page 273 to provide disaggregated revenue disclosure by product type, similar to your presentation on page F-23.
29. We note your disclosure that D-Wave's implied enterprise value was based, in part, on an analysis of comparable companies. Please revise your disclosure on page 275 to explain the criteria used to select the comparable companies used. We note your reference to competitors Rigetti Computing and IonQ on page 189. Please tell us how you considered other similarly sized publicly traded quantum computing companies.

Certain Benefits of DPCM's Directors and Officers and Others in the Transaction, page 277

30. We note your disclosure on page 78 that certain of your directors and officers would not be able to serve as an officer or director if DPCM's charter did not waive the doctrine of corporate opportunity. Please address this potential conflict of interest and whether it impacted your search for an acquisition target and revise the conflicts of interest discussion so that it highlights all material interests in the transaction held by the sponsor and the company's officers and directors. This could include fiduciary or contractual obligations to other entities as well as any interest in, or affiliation with, the target company. In addition, please clarify how the board considered those conflicts in negotiating and recommending the business combination.

D-Wave Systems, Inc. Consolidated Financial Statements

2. Basis of presentation and summary of significant accounting policies

Revenue recognition, page F-16

31. Please revise to explain in detail what is meant by the statement that professional services are recognized "as they are earned based on the terms of the contract". Please also revise to explain when you use this method to recognize revenue as compared to an input method based upon costs incurred.
32. We note your discussion of your offerings on page 178 and your discussion of key strategic relationships on page 188. Please revise your revenue recognition policy footnote to more clearly explain how the offerings you describe on page 178 correspond to your discussion of performance obligations on pages F-16 through F-18.
33. You disclose on page F-18 that revenue from QCaaS is recognized on a straightline basis over the contractual period. However, on page 194, you indicate that QCaaS revenue may also be recognized on a usage basis. If your contracts with customers include variable fee arrangements based upon usage or other variable payment terms, please revise to disclose how you recognize variable consideration. Please refer to ASC 606-10-50-20.

Contract assets and contract liabilities, page F-18

34. Your disclosure on page F-18 distinguishes between contract liabilities associated with deferred product revenue and deferred service revenue and indicates that deferred service revenue typically results from maintenance and other service contracts. Your revenue disclosures on page F-17 make no reference to maintenance contracts and indicates that deferred revenue is primarily composed of fees related to QCaaS. Please revise to more clearly explain what deferred revenue represents. To the extent that you have maintenance or other service contracts with customers, please revise to more clearly explain the terms of those contracts, the related performance obligations, and how you recognize revenue associated with those contracts.

9. Leases, page F-28

35. Please revise to clarify what is meant by footnote (1) next to the weighted average discount rate in the table of weighted-average remaining lease terms and discount rates for operating leases on page F-29.

12. Stock-based compensation, page F-33

36. Please provide us with a breakdown of all equity awards granted from July 1, 2021 and leading up to your filing, including the fair value of the underlying common stock used to value such awards. To the extent there were any significant fluctuations in the fair values from period-to-period, please describe for us the factors that contributed to those fluctuations, including any intervening events within the Company or changes in your valuation assumptions or methodology. Compare the most recent valuations for options granted to the fair value of shares of common stock as determined by the exchange ratio in the merger agreement.

15. Earnings per share, page F-38

37. We note your disclosure on page F-38 that potentially dilutive securities were not included in the diluted per share calculations because they would be anti-dilutive. As such, it's unclear why your table showing the computation of basic and diluted net loss per share includes a line item for the effect of stock options. Please explain why this line item is included or revise to remove it from the table.

Emil Michael
D-Wave Quantum Inc.
April 15, 2022
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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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Lisa Etheredge, Senior Staff Accountant, at (202) 551-3424 or Robert Littlepage, Accounting Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact Patrick Faller, Staff Attorney, at (202) 551-4438 or Jan Woo, Legal Branch Chief, at (202) 551-3453 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Technology

cc: Adam M. Givertz