Via EDGAR

Ms. Claire Erlanger Mr. Kevin Woody Office of Manufacturing Division of Corporation Finance Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549-0306

Re: Vicor Corporation Form 10-K for the Year Ended December 31, 2021 Form 10-Q for the Quarter Ended June 30, 2022 File No. 000-18277

Dear Ms. Erlanger and Mr. Woody:

This letter is submitted on behalf of Vicor Corporation ("Vicor" or the "Company") in response to comments of the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") with respect to the Company's Form 10-K for the year ended December 31, 2021 and Form 10-Q for the quarter ended June 30, 2022, as set forth in the letter dated November 1, 2022, from the Staff to Mr. James Schmidt (the "Comment Letter").

For ease of reference, the text of the Comment Letter has been reproduced herein with responses below each numbered comment.

Form 10-K for the Year Ended December 31, 2021

Note 17. Segment Information, page 71

 We note your disclosure that in the second quarter of 2019, management determined, with the approval of the Company's BOD and CODM, Dr. Vinciarelli, you would report as one segment, rather than under the three segment approach previously employed since 2007. We also note your disclosure that your CODM now determines the allocation of resources based upon the two product groupings, which constitute one segment. Please clarify for us if you are referring to one reportable segment, or one operating segment. If you believe you have one reportable segment, but more than one operating segment, please provide us your aggregation analysis under ASC 280-10-50-11. If you believe you only have one operating segment, please provide us the following information: Ms. Claire Erlanger Mr. Kevin Woody Securities and Exchange Commission November 15, 2022 Page 2 of 13

- Provide us with details about your management structure and how your company is organized;
- Describe the role of your CODM and each of the individuals reporting to the CODM;
- Identify and describe the role of each of your segment managers;
- Describe the key operating decisions, who makes these decisions, how performance is assessed and how resources are allocated within your business;
- Tell us how often the CODM meets with his direct reports, the financial information the CODM reviews in conjunction with those meetings, and the other participants at those meetings;
- Explain how budgets are prepared, who approves the budget at each step of the process, the level of detail discussed at each step, and the level at which the CODM makes changes to the budget; and
- Describe the basis for determining the compensation for each individual that reports to the CODM.

Response to Comment No. 1

The Company acknowledges the Staff's comment and respectfully advises the Staff that, in accordance with Accounting Standards Codification ("ASC") 280, the Company considered the information provided to and used by its Chief Operating Decision Maker ("CODM") for evaluating performance of the operating segment and other information used to evaluate the segment's financial performance or make resource allocation decisions when assessing the appropriate segments disclosures. We considered the provisions of ASC 280-10-50 when determining our operating segments. Based on the operational changes to our business, the lack of discrete information provided to the CODM, and the way the CODM views and manages the business, we concluded that, beginning in the second quarter of 2019 and continuing today, there is one operating segment. The Company discloses product information based on its two primary product portfolios, Brick Products and Advanced Products, under the guidance of ASC 606, Revenue from Contracts with Customers, as additional information to evaluate our business.

The Company's CODM, Vicor's Chief Executive Officer, Dr. Patrizio Vinciarelli, is responsible for making decisions about resource allocations and assessing the performance of the Company's operating segment.

Furthermore, the Company respectfully provides the following responses to the individual bullet points in the Staff's comment.

First Bullet: Provide us with details about your management structure and how your company is organized.

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The executive management team that reports to the CODM is based in the United States with the majority of the team based at the Company's headquarters in Andover, Massachusetts. The team includes the head of manufacturing operations responsible for manufacturing, supply chain and distribution activities, as well as other functional leaders for sales and marketing, engineering, information technology, human resources, and finance. Also reporting to the CODM is the head of design of microcontrollers consumed across all Vicor product families.

Based on design, performance, and form factor considerations, as well as the range of evolving applications for which our products are appropriate, we categorize our product portfolios as either "Advanced Products" or "Brick Products." The Advanced Products category consists of our more recently introduced products, which are largely used to implement our proprietary Factorized Power Architecture[™], an innovative power distribution architecture enabling flexible, rapid power system design using individual components optimized to perform a specific conversion function.

The Brick Products category largely consists of our broad and well-established families of integrated power converters, incorporating multiple conversion stages, used in conventional power systems architectures. Given the growth profiles of the markets we serve with our Advanced Products line and our Brick Products line, our strategy involves a transition in organizational focus, emphasizing investment in our Advanced Products line and targeting high growth market segments with a low-mix, high-volume operational model, while maintaining a profitable business in the mature market segments we serve with our Brick Products line with a high-mix, low-volume operational model.

Both product lines are built in the Company's manufacturing facility in Andover, Massachusetts employing similar processing and production techniques, and are supported and managed by the same sales and marketing, engineering, and administrative organizations.

Second Bullet: Describe the role of your CODM and each of the individuals reporting to the CODM.

As previously mentioned, the Company's CODM is Dr. Vinciarelli, Vicor's founder, Chairman of the Board, President, and Chief Executive Officer, who holds approximately 80% of share-based voting control and approximately 48% of all outstanding shares of our common stock. Vicor is a controlled company under the rules of The NASDAQ Stock Market. Dr. Vinciarelli has comprehensive oversight of the consolidated Company affairs and is the key, controlling individual making decisions about the resources to be allocated.

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The CODM determines the Company's overall strategy and is responsible for the allocation of resources and assessment of operating performance. In particular, he makes the Company's key operating decisions related to how much to invest in the consolidated business, as well as corporate overhead and research and development activities. He also makes the Company's key strategic and operating decisions, including launching new products and offerings, approving significant capital and research and development expenditures, implementing brand marketing strategies, and directing strategic partnerships and initiatives to further key manufacturing capabilities.

The following individuals report directly to the CODM and support the consolidated business. These individuals are responsible for managing the following functional areas: manufacturing operations including manufacturing, supply chain and distribution activities, sales and marketing, engineering, information technology, human resources, and finance and also include the head of design of microcontrollers consumed across all Vicor products.

- Michael McNamara- Corporate Vice President, General Manager, Operations
- Philip Davies- Corporate Vice President, Global Sales and Marketing
- Sean Crilly- Corporate Vice President, Engineering, Power Systems
- Al Doyle- Corporate Vice President and Chief Information Officer
- Nancy Grava- Corporate Vice President, Human Resources
- · James Schmidt- Corporate Vice President, Chief Financial Officer, Treasurer and Corporate Secretary
- Claudio Tuozzolo- Corporate Vice President and President of Vicor Power Components

Despite the titles and roles of the members of the executive management team, Dr. Vinciarelli firmly asserts his control over all strategic, product development, and operational matters.

Third Bullet: Identify and describe the role of each of your segment managers.

The Company does not have any segment managers and is functional based on the consolidated operations of the business.

Fourth Bullet: Describe the key operating decisions, who makes these decisions, how performance is assessed and how resources are allocated within your business.

The Company's key operating decisions relate to the allocation of resources and investments for (i) the continued growth and increased profitability of the business, (ii) the product portfolio, and (iii) research and development activities that relate to expected future products to meet customer demands. Consistently, decisions related to research and development activities, new designs, markets, and manufacturing capabilities are key operating decisions, all of which are made by the CODM.

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Dr. Vinciarelli's review since early 2019 has been on consolidated financial results, major customer accounts, and new product initiatives, particularly on a product line basis within our Brick Products line and our Advanced Products line. Given the growth profiles of the markets the Company serves, the Company's strategy has evolved with a transition in organizational focus, emphasizing investment in Advanced Products, which target high growth market segments with a low-mix, high-volume operational model, while maintaining a profitable business in mature market segments served with Brick Products with a high-mix, low-volume operational model.

Performance measures used in the assessment of the Company and how resources are allocated are as follows:

- *Consolidated and Product Line Net Revenues:* Measure used by the CODM to assess overall consolidated top line performance of the Company. Consolidated Net Revenue is reviewed by the CODM and the executive management team.
- Consolidated Gross Margin: Measure used by the Company to assess profitability of the products sold, which includes cost of revenues.
- *Consolidated Operating Margin:* Measure used by the Company to assess overall profitability and level of investment across the consolidated Company, which includes Income from Operations after Selling, general and administrative expenses and Research and development expenses. The CODM and executive management team are responsible for managing the overall results of the Consolidated Operating Margin.
- *Bookings and Backlog:* Metrics used by the Company to assess overall amount and volume of bookings activity and remaining backlog. Bookings and Backlog are reviewed by the CODM and the Company's executive management team.

Fifth Bullet: Tell us how often the CODM meets with his direct reports, the financial information the CODM reviews in conjunction with those meetings, and the other participants at those meetings.

Our CODM meets with those reporting to him on a regular and as-needed basis, including individual meetings and formal meetings, such as weekly meetings of the executive leadership team. These meetings are held with the CODM's direct reports to obtain updates on key initiatives, including initiatives related to people, development, projects, engineering design and strategy. Our CODM is a PhD Engineer so the focus of these meetings tends to be customer, product and operational in nature and financial information is not regularly prepared for these meetings.

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However, on a weekly basis, the CODM participates in a revenue update meeting where he receives weekly and quarter to date revenue information relevant to monitoring our business on a product line and consolidated basis. Such information relates to actual, planned and estimated revenue throughout the month and on a quarter to date basis, as well as the status of bookings and backlog. The CODM does not receive a measure of profitability below the consolidated level.

Sixth Bullet: Explain how budgets are prepared, who approves the budget at each step of the process, the level of detail discussed at each step, and the level at which the CODM makes changes to the budget.

The Company does not utilize a typical budget process, rather we use a rolling plan approach looking out to the next quarter and to the end of the thencurrent fiscal year in our planning cycle. At the end of each year, we will plan for the next full year. The plan starts with a product line revenue goal being determined and agreed to by the operations and sales teams to ensure that demand and supply are achievable in the given planning horizon. The revenue goal, along with the current bookings and backlog reporting, will help form a view of the product mix to be manufactured, along with the associated costs to manufacture the products to determine the consolidated gross margin amount at the total company level. Operating expenses for sales, general and administrative functions, and research and development expenses are determined based upon historical trends, run rates, and future growth plans to ultimately build a consolidated Company rolling plan and Income from Operations.

The plan is reviewed with the CODM for necessary changes on a quarterly basis, compared with actual results and informed by strategic considerations as well as external factors such as the macroeconomic environment and specific customer information. Any updates required due to significant changes for new business initiatives, manufacturing capabilities or current market conditions are incorporated into the plan during the next update cycle.

As discussed above, the discrete financial information that is available and regularly provided to the CODM that is used to allocate resources, assess the operating results of the business including comparison to plans, and make the key operating decisions of the Company includes product line revenue details and overall profitability on a consolidated basis.

Seventh Bullet: Describe the basis for determining the compensation for each individual that reports to the CODM.

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The Company respectfully advises the Staff that the determination of compensation for the Company's executive officers is described in its Definitive Proxy Statement on Schedule 14A, filed with the Commission on April 29, 2022. The guidelines and principles described therein are applied to the CODM's direct reports. The Company further notes that when determining compensation for the CODM's direct reports, none are compensated based on the financial performance of any specific product line, division, subsidiary or any other segmented measure of financial performance.

<u>General</u>

- 2. Please disclose whether and how your business segments, products, lines of service, projects, or operations are materially impacted by supply chain disruptions. For example, discuss whether you have or expect to:
 - suspend the production, purchase, sale or maintenance of certain items due to a lack of raw materials, parts, or equipment; inventory shortages; reduced headcount; or delayed projects;
 - experience labor shortages that impact your business;
 - experience cybersecurity attacks in your supply chain;
 - experience higher costs due to constrained capacity or increased commodity prices or challenges sourcing materials;
 - experience surges or declines in consumer demand for which you are unable to adequately adjust your supply; or
 - be unable to supply products at competitive prices or at all due to export restrictions, sanctions, tariffs, trade barriers, or political or trade tensions among countries;

Explain whether and how you have undertaken efforts to mitigate the impact and where possible quantify the impact to your business.

Response to Comment No. 2

The Company acknowledges the Staff's comment and advises the Staff that, at the time the Company's Annual Report on Form 10-K for the year ended December 31, 2021 (our "Form 10-K") was filed, the Company had evaluated and disclosed the adverse impacts it had experienced from supply chain disruptions to its business, products, and operations, where applicable. For example, in the subsection titled "Ongoing / Potential Impacts of the COVID-19 Pandemic on the Company," in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" on page 30 of our Form 10-K, the Company stated as follows:

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"As of the date of this report, the number of Company employees diagnosed with COVID-19 and the corresponding absenteeism due to COVID-19 are negligible. We did experience higher rates of absenteeism in January 2022, as experienced in many parts of the country during that period. While the productivity of our factory is not currently impacted by COVID-19, productivity may be reduced if quarantine rates increase or if the number of employees diagnosed with COVID-19 requires further implementation of restrictive health and safety measures, including factory closure. We continue to operate with three shifts in our factory, and, with very few exceptions, our engineering, sales, and administrative personnel are working from the Company's offices.

We are closely monitoring the operating performance and financial health of our customers, business partners, and suppliers, but an extended period of operational constraints brought about by the pandemic could cause financial hardship within our customer base and supply chain. Such hardship may continue to disrupt customer demand and limit our customers' ability to meet their obligations to us. Similarly, such hardship within our supply chain could continue to restrict our access to raw materials or services. Additionally, restrictions or disruptions of transportation, such as reduced availability of cargo transport by ship or air, could result in higher costs and inbound and outbound delays. We have taken steps to address certain supply chain risks, and we believe our actions have mitigated those risks to date; however, there are no assurances that those steps will continue to mitigate risks in 2022 and beyond.

Although there is uncertainty regarding the extent to which the pandemic will continue to impact our operational and financial results in the future, the Company's high level of liquidity, flexible operational model, existing raw material inventories, and increased use of second sources for critical manufacturing inputs together support management's belief the Company will be able to effectively conduct business until the pandemic passes.

We are monitoring the rapidly changing circumstances, and may take additional actions to address COVID-19 risks as they evolve. Because much of the potential negative impact of the pandemic is associated with risks outside of our control, we cannot estimate the extent of such impact on our financial or operational performance, or when such impact might occur."

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We also direct the Staff's attention to other statements in our Form 10-K regarding supply chain disruptions, including the statements made in:

- The subsection titled "Manufacturing, Quality Assurance, and Supply Chain Management" in Item 1. "Business" on pages 10 and 11 of our Form 10-K; and
- The risk factors titled "Our future operating results are difficult to predict and are subject to fluctuations," "Global economic and political uncertainties, notably those associated with trade policy, could materially and adversely affect our business and consolidated operating results," "We may not be able to procure necessary key components or raw materials, or we may purchase excess raw material inventory or unusable inventory, which increases the risk of reserve charges to reduce the value of any inventory deemed excess or obsolete, thereby reducing our profitability," "We rely on third-party vendors and subcontractors for supply of components, assemblies, and services and, therefore, cannot control the availability or quality of such components, assemblies, and services," "Extended interruption of production at our manufacturing facility in Andover, Massachusetts, could materially reduce our revenue, increase our costs, and, potentially, negatively impact our customers," "An extended delay in completing our capacity expansion could have a material adverse effect on our results of operations and negatively impact our ability to execute on our Advanced Products strategy," and "Disruption of our information technology infrastructure could adversely affect our business" in Item 1A. "Risk Factors" beginning on page 14 of our Form 10-K.

Since the filing of our Form 10-K, the Company has continued to assess the effect of supply chain disruptions on its business, products and operations and has included additional disclosures in its periodic reports where appropriate. For example, in its most recent Quarterly Report on Form 10-Q for the period ended September 30, 2022 (the "Q3 10-Q"), the Company disclosed in Part I, Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations" that:

"Supply chain disruptions, including those associated with lockdowns in China due to their zero-COVID policy, those associated with our reliance on outsourced package process steps that are essential in the production of some of our Advanced Products, and those relating, for example, to the procurement of raw material, have in the past negatively impacted and may in the future negatively impact our operating results. We have taken steps to mitigate the impact of supply chain disruptions by, among other things and in varying degrees, moving outsourced manufacturing steps in-house to the Company, ordering supplies with extended lead times, paying higher prices for certain supplies or outsourced production, and expediting deliveries at a cost premium. The resulting impact of the steps taken to mitigate supply chain disruptions have, to varying degrees and at different times, reduced our revenue, gross margin, operating profit and cash flow and may continue to do so in the future. While we continue to make progress in moving outsourced manufacturing steps in-house to the Company, we are still experiencing long lead times on certain raw material components, sporadic disruptions related to shutdowns in China as a result of their zero-COVID policy, and uncertainty of output from our outsourced manufacturing supplier. Our quarterly gross margin as a

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percentage of net revenues may vary, depending on production volumes, average selling prices, average unit costs, the mix of products sold during that quarter, and the level of importation of raw materials subject to tariffs. Our quarterly operating margin as a percentage of net revenues also may vary with changes in revenue and product level profitability, but our operating costs, aside from recent increases in legal expense associated with the intellectual property litigation with SynQor Inc., are largely associated with compensation and related employee costs, which are not subject to sudden or significant changes."

Additionally, the Company stated that:

"We are closely monitoring the operating performance and financial health of our customers, business partners, and suppliers, but an extended period of operational constraints brought about by the pandemic could cause financial hardship within our customer base and supply chain. Such hardship may continue to disrupt customer demand and limit our customers' ability to meet their obligations to us. Similarly, such hardship within our supply chain could continue to restrict our access to raw materials or services. Additionally, restrictions or disruptions of transportation, such as reduced availability of cargo transport by ship or air, have resulted and may continue to result in higher costs and inbound and outbound delays."

In response to the Staff's comment and consistent with its ongoing disclosure obligations, in future filings with the Commission, the Company will continue to evaluate and, when appropriate, disclose whether and how its business, products, and operations are materially impacted by supply chain disruptions, including any efforts undertaken by management to mitigate such disruptions and will disclose to the extent material or possible the quantifiable impact of such matters.

Form 10-Q for the Quarter Ended June 30, 2022

Management's Discussion and Analysis of Financial Condition and Results of Operations Overview, page 20

3. We note your disclosure within MD&A that external factors such as supply chain uncertainties have caused your operating results to vary meaningfully. Please discuss in future filings whether supply chain disruptions materially affect your outlook or business goals. Specify whether these challenges have materially impacted your results of operations or capital resources and quantify, to the extent possible, how your sales, profits, and/or liquidity have been impacted. Also, please discuss known trends or uncertainties resulting from mitigation efforts undertaken, if any. Explain whether any mitigation efforts introduce new material risks, including those related to product quality, reliability, or regulatory approval of products.

Response to Comment No. 3

We acknowledge the Staff's comment, and commencing with our Annual Report on Form 10-K for the year ending December 31, 2022, the Company will provide additional disclosures discussing whether supply chain disruptions have materially affected our outlook or business goals and whether these challenges have materially impacted our results of operations or capital resources. We will provide quantitative disclosures, to the extent material or possible, with respect to the impact of these challenges on our sales, profits and/or liquidity. We will also disclose any known trends or uncertainties resulting from mitigation efforts undertaken, if any, and explain whether any mitigation efforts introduce new material risks, including those related to product quality, reliability or regulatory approval of products.

Six Months Ended June 30, 2022 Compared to Six Months Ended June 30, 2021, page 25

4. We note your disclosure that for the six months ended June 30, 2022 compared to the six months ended June 30, 2021, the increase in net revenue for Advanced Products was primarily the result of growth in the data center and high performance computing business. The decrease in net revenues for Brick Products was due to unfavorable market conditions. In light of the significant increase in Advanced Products at the same time that Brick Products had a significant decrease, please expand your discussion to include the extent to which such changes are attributable to changes in prices or changes in the volume or amount of goods sold, or to the introduction of new products or services. See guidance in Item 303(b)(2)(iii) of Regulation S-K.

Response to Comment No. 4

We acknowledge the Staff's comment. In response to the Staff's comment, we propose to expand our discussion in future filings to clarify, where applicable, that changes in net revenue are attributable to fluctuations in shipment volumes and to a lesser extent changes in prices. An example of such expanded discussion is as follows:

"Changes in our net revenue are primarily attributable to fluctuations in shipment volumes. Our net revenue can be affected by changes in demand for higher priced or lower priced products, which we refer to as changes in the mix of products shipped. The increase in net revenues for Advanced Products was primarily the result of growth in the data center and high performance computing business. The decrease in net revenues for Brick Products was primarily due to unfavorable market conditions." Ms. Claire Erlanger Mr. Kevin Woody Securities and Exchange Commission November 15, 2022 Page 12 of 13

5. We note your disclosure that for the six months ended June 30, 2022 as compared to the six months ended June 30, 2021, the decrease in gross margin dollars and gross margin percentage was primarily due to unfavorable changes in product mix, a negative impact from production inefficiencies associated with initial production volumes of new products, and certain supply chain cost increases. In light of the significant decrease in gross margin while net revenue increased in Advanced Products and decreased in Brick Products during this period, please explain to us and revise to provide further detail of the nature of the changes in gross margin. As part of your response and revised disclosure, please quantify the factors responsible for the change in gross margin, including any offsetting amounts.

Response to Comment No. 5

We acknowledge the Staff's comment. In response to the Staff's comment, we propose to expand our discussion in future filings to separately quantify and discuss the factors responsible for changes in the levels of cost of sales when material to understanding changes in our gross margin between periods. An example of such expanded discussion is as follows:

"Gross margin for the six months ended June 30, 2022 decreased \$10,121,000, or 10.7%, to \$84,450,000 from \$94,571,000 for the six months ended June 30, 2021. Gross margin, as a percentage of net revenues, decreased to 44.3% for the six month period ended June 30, 2022, as compared to 51.3% for the six month period ended June 30, 2021. The decrease in gross margin dollars and gross margin percentage was attributable to unfavorable changes in product mix, production inefficiencies associated with initial production volumes of new products, and certain increases in supply chain costs, including an increase of \$7,300,000 in outsourced manufacturing costs of certain Advanced Products, and an increase of \$3,600,000 in freight-in and tariff costs."

* * * * *

In connection with providing our responses to your comments, we acknowledge the Company and its management are responsible for the accuracy and adequacy of the disclosures in the Company's filings with the Commission, notwithstanding any review, comments, action or absence of action by the Staff.

If you should have any questions concerning these responses, please contact Mr. Schmidt at 978-749-3215 or Mr. Fendelet at 978-749-3552.

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Regards,

/s/ James F. Schmidt James F. Schmidt Vice President Chief Financial Officer

/s/ Quentin Fendelet

Quentin Fendelet Vice President Chief Accounting Officer

cc: Mark Plichta, Foley & Lardner LLP Megan Odroniec, Foley & Lardner LLP