

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

February 22, 2017

Denver Lough Chief Executive Officer PolarityTE, Inc. 4041-T Hadley Road S. Plainfield, New Jersey 07080

Re: PolarityTE, Inc.

Registration Statement on Form S-1

Filed January 30, 2017 File No. 333-215816

Preliminary Proxy Statement on Schedule 14A

Filed February 6, 2017 Filed No. 000-51128

Dear Mr. Lough:

We have limited our review of your registration statement and preliminary proxy statement to those issues we have addressed in our 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.

Form S-1 Filed on January 30, 2017

PolarityTE, Inc.

Agreement and Plan of Reorganization, page 5

1. You indicate that the "Seller" is expected to own approximately 50% of the issued and outstanding Common Stock ... at closing," upon conversion of each of the Series E Preferred Stock issued in the merger transaction, and each Series E share will have two votes for every share Common Stock convertible. Please revise to clarify the approximate voting power that the Mr. Denver Lough will have upon the consummation of your merger with PolarityTE NV.

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Business, page 27

2. Please revise to clarify your future plans for your legacy software and gaming business. While you reference the declining popularity of your games on page eight, it is unclear if you will seek to divest your existing software and gaming business, reallocate your resources primarily towards the skin rejuvenation assets, and/or whether you will continue to operate and invest in both business lines. For example, on page seven, we note that you raised \$2,278,001 in a private placement on December 16, 2016, but it is unclear how these funds will be utilized.

PolarityTE NV, page 31

3. You describe PolarityTE NV's regenerative medicine and tissue engineering platform and its "launch product which is being prepared for clinical trials." Please provide sufficient detail of the current operations of PolarityTE NV and provide a plan of operations or similar disclosure of the steps and funds necessary to bring your prospective product to market.

Preliminary Proxy Statement on Schedule 14A Filed on February 6, 2017

General

4. To the extent any of the above comments are relevant to your proxy statement, please revise as appropriate.

Financial Statements and Supplementary Data

5. Tell us and disclose whether you will account for the acquisition of PolarityTE NV as an asset acquisition or as a business combination. Indicate whether PolarityTE NV is a business. We refer you to Article 11-01(d) of Regulation S-X and ASC 805-10-15. In this regard, clarify whether financial statements and pro forma information are required for this acquisition. We refer you to Rule 8-04 of Regulation S-X.

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 Rule 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.

Denver Lough PolarityTE, Inc. February 22, 2017 Page 3

Please contact Edwin Kim, Staff Attorney, at (202) 551-3297 or me at (202) 551-3735 with any questions.

Sincerely,

/s/ Barbara C. Jacobs

Barbara C. Jacobs Assistant Director Office of Information Technologies and Services

cc: Harvey Kesner, Esq. Sichenzia Ross Ference Kesner LLP