



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

August 22, 2016

Via E-mail

Russell C. Ellwanger
Chief Executive Officer
Tower Semiconductor Ltd.
Ramat Gavriel Industrial Park
P.O. Box 619
Migdal Haemek 23105, Israel

**Re: Tower Semiconductor Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2015
Filed May 11, 2016
File No. 0-24790**

Dear Mr. Ellwanger:

We have limited our review of your filing to the financial statements and related disclosures 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 20-F for the Fiscal Year Ended December 31, 2015

Item 5. Operating and Financial Review and Prospects

Results of Operations, page 45

1. We note from the discussion of risk factors on page 12 that utilization rates for the operation of your facilities directly impact whether or not you achieve operating and net profits and are able to fully cover your operating costs. Please refer to Item 5(A) and 5(D) of Form 20-F and to the extent that you expect utilization rates to have a material favorable or unfavorable impact on income from continuing operations or change the relationship between costs and revenues, please revise future filings to discuss and describe their impact on your results of operations.

B. Liquidity and Capital Resources, page 49

2. We note that you discuss a non-GAAP measure, namely “positive cash from operating activities (net of \$12.4 million interest payments and excluding \$24.9 million non-recurring Nishiwaki employee termination related payments in connection with its 2014 cessation of operations),” in the last paragraph on page 49. Please revise future filings to properly label this measure as non-GAAP and to provide all of the disclosures required by Item 10(e)(1)(i) of Regulation S-K.

Our Operations in Japan, page 53

3. We note that the expanded discussion of restructuring charges provided here in response to comment 1 in our letter dated September 30, 2015 does not include all the requested revisions. Please refer to SAB Topic 5P and further revise this discussion in future filings to address the following:
 - Quantify the expected effects on future operating income (i.e., the amount by which you expect expenses to decrease) and cash flows including the period the effects are expected to be realized. In this regard, please also discuss how your revenues may be adversely affected by the restructuring actions.
 - Disclose whether you have realized the anticipated savings. If the anticipated savings are not achieved as expected or are achieved in periods other than as expected, please disclose these facts. Also, disclose the reasons for any such differences and discuss the likely effects on future operating results and liquidity.

Item 15. Controls and Procedures

Internal Control over Financial Reporting, page 102

4. We note that management’s annual report on internal control over financial reporting does not include the statement identifying the framework used to evaluate the effectiveness of your internal control over financial reporting as required by paragraph (c) of Exchange Act Rule 13a-15 and Item 15(b) of Form 20-F. Please amend your filing to provide a revised management’s annual report on internal control over financial reporting that includes the required information and complies fully with Item 15(b) of Form 20-F.

Consolidated Statements of Operations, page F-5

5. We note that you also generate revenues from sales of engineering and design support and other technical and support services. Tell us the amount of revenue recognized from the sale of these services in each of the reported periods. If material, revise future filings to present revenues from services and costs of services separately on your statements of operations. Refer to Rule 5-03(b)(1) and Rule 5-03(b)(2) of Regulation S-X.

6. We note the discussion on pages 28 through 31 of the products and services you offer. In future filings please disclose revenues from external customers for each product or service or each group of similar products and services. If providing the information is impracticable, disclose that fact. Refer to ASC 280-10-50-40.

Consolidated Statements of Cash Flows, page F-8

7. We note that you present the caption Investments in property and equipment, net. Please revise future filings to separately present the cash inflows and cash outflows for property and equipment on a gross basis as discussed in ASC 230-10-45-26.

Note 2 – Summary of Significant Accounting Policies

D. Allowance for Doubtful Accounts, page F-11

8. Please revise future filings to disclose the amount of your allowance for doubtful accounts as required by ASC 310-10-50-4. In addition, in future filings include the information required by Rule 12.09 of Regulation S-X relating to this account.

Note 8 – Property and Equipment, Net,

A. Composition, page F-21

9. We note that you extended the estimated useful lives of machinery and equipment to 15 years from 7 years and the useful lives of facility infrastructure to 25 years from 14 years. Please revise future filings to disclose the effect of this change in estimate on basic and diluted earnings per share as required by ASC 250-10-50-4.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Russell C. Ellwanger
Tower Semiconductor Ltd.
August 22, 2016
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You may contact David Burton at (202) 551-3626, or me at (202) 551-3662 with any questions. You may also reach Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

/s/ Kevin J. Kuhar

Kevin J. Kuhar
Accounting Branch Chief
Office of Electronics and Machinery