



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

DIVISION OF
CORPORATION FINANCE

April 5, 2011

Mr. David W. King
Chief Financial Officer
Suntech Power Holdings Co., Ltd.
R&D Mansion, 9 Xinhua Road
New District, Wuxi
Jiangsu Province 214028
People's Republic of China

**Re: Suntech Power Holdings Co., Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2009
Filed May 11, 2010
File No. 001-32689**

Dear Mr. King:

We have reviewed your response letter dated March 21, 2011 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 within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 6-K filed December 6, 2010

Exhibit 99.1

1. We note your response to prior comment 2. In the response to the third bullet, you state that GSF records its investments at fair value. Separately, you state that GSF values its investee companies at cost until the construction phase is completed. Please explain to us how a valuation at cost during the construction phase represents the fair value of the investee companies based on Topic 820-10 of the FASB Accounting Standards Codification.
2. Please clarify for us if GSF's financial statements are prepared in accordance with US GAAP. If not, please clarify what basis such financial statements are prepared and describe the procedures you undertake to ensure your equity in earnings (loss) of investee calculation is based on the US GAAP earnings (loss) of GSF.

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You may contact Lynn Dicker, Staff Accountant, at 202-551-3616 or me at 202-551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at 202-551-3671.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief

cc: Ms. Amy Yi Zhang, Interim Chief Financial Officer