



DIVISION OF  
CORPORATION FINANCE

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

February 5, 2015

Via e-mail  
Arnold Klann  
Chief Executive Officer  
BlueFire Renewables, Inc.  
31 Musick  
Irvine, CA 9261

**Re: BlueFire Renewables, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed February 2, 2015  
File No. 333-201356**

Dear Mr. Klann:

We have reviewed your registration statement and have the following comments.

Calculation of Registration Fee Table

1. We note your reference to Rule 416 of the Securities Act in footnote 1 to the fee table. Please note that Rule 416 does not permit you to register an indeterminate number of additional shares that may be issued due to a shortfall resulting from application of the pricing mechanism in the Equity Purchase Agreement. Please confirm your understanding that in the event such adjustment requires you to issue more shares than you are registering on this registration statement, you will file a new registration statement to register those additional shares. Refer to Interpretation 213.02 of our Securities Act Rules Compliance and Disclosure Interpretations.

Selling Security Holder, page 15

2. Please provide us with an analysis of the impact of your potential need to register additional shares if the market price of your equity drops on the determination that Kodiak is irrevocably bound to purchase the securities subject to the equity line agreement. Please refer to comment 3 of our letter dated January 23, 2015.

Undertakings, page 52

3. Please revise to include the undertakings required by Item 512 of Regulation S-K. Please note that comment 7 of our letter dated January 23, 2015 only requested that you remove the undertaking found in Item 512(a)(6) of Regulation S-K.

Arnold Klann  
BlueFire Renewables, Inc.  
February 5, 2015  
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Please contact Leland Benton at (202) 551-3791 or me at (202) 551-3397 with any other questions.

Sincerely,

/s/ Jay Ingram

Jay Ingram  
Legal Branch Chief

CC: Brian C. Tribuna (*via e-mail*)  
Lucosky Brookman LLP