

April 19, 2017

**VIA EDGAR**

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, DC 20549-3628

Attention: Amanda Ravitz, Assistant Director  
Tom Jones, Examiner

**Re: Ideal Power Inc.  
Registration Statement on Form S-3 (File No. 333-217088)**

**Filed March 31, 2017  
Acceleration Request**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Ideal Power Inc. (the “**Registrant**”) hereby respectfully requests that the Securities and Exchange Commission (the “**Commission**”) accelerate the effectiveness of the above-referenced Registration Statement on Form S-3 to 4:30 p.m., Eastern Time, on April 21, 2017, or as soon thereafter as practicable. The Registrant hereby authorizes Samer M. Zabaneh, of DLA Piper LLP (US), counsel to the Registrant, to orally modify or withdraw this request for acceleration.

The Registrant hereby acknowledges that:

- should the Commission or the staff of the Commission (the “**Staff**”), acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Registrant may not assert Staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

We request that we be notified of the effectiveness of the Registration Statement by telephone to Samer M. Zabaneh of DLA Piper LLP (US) at (512) 457-7126. We also respectfully request that a copy of the Commission’s order declaring the Registration Statement effective be sent to Samer M. Zabaneh via facsimile at (512) 457-7001. Thank you for your assistance.

Very truly yours,  
IDEAL POWER INC.

By: /s/ Timothy W. Burns  
Timothy W. Burns  
Chief Financial Officer

cc: R. Daniel Brdar (Ideal Power Inc.)  
Samer M. Zabaneh (DLA Piper LLP (US))  
Anna M. Denton (DLA Piper LLP (US))