

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

Mail Stop 3561

September 8, 2017

Donald Tremblay Chief Financial Officer TransAlta Corporation 110-12th Avenue S.W. Box 1900, Station M Calgary, Alberta, Canada, T2P 2M1

Re: TransAlta Corporation

Form 40-F for the Fiscal Year Ended December 31, 2016

Filed March 3, 2017 File No. 1-15214

Dear Mr. Tremblay:

We have reviewed your filing and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment 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 comment applies to your facts and circumstances, please tell us why in your response.

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

Note 8. Net Other Operating (Income) loss, page F36

A Mississauga Cogeneration Facility Contract

1. Please describe the details of the one-time discounted revenue amount which led to the gain recognition in December 2016. Please include a discussion of the terms of the terminated and new contracts, as applicable, and reference to the IFRS guidance used for the accounting treatment.

Donald Tremblay TransAlta Corporation September 8, 2017 Page 2

You may contact Ta Tanisha Meadows, Staff Accountant, at (202) 551-3322 or Donna Di Silvio, Staff Accountant, at (202) 551-3202 if you have questions regarding our comment. Please contact me at (202) 551-3344 with any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson Accounting Branch Chief Office of Consumer Products