

# Yale Finance

STEPHEN C. MURPHY  
Vice President for Finance and  
Chief Financial Officer

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New Haven, CT 06511

REC RG10926-18 AM 10:08

September 21, 2018

Dr. 2

U.S. NRC Region I  
2100 Renaissance Blvd., Suite 100  
King of Prussia, PA 19406-2713

Attention: Dennis Lawyer, Health Physicist  
Division of Nuclear Materials Safety

Re: Yale University – Annual Financial Test Submittal (License No. 06-00183-03 and  
License No. 06-00183-08) Self-Guarantee under 10 CFR Part 30 and Part 70

03000582

03038333

Ladies and Gentlemen:

I am the Vice President for Finance of Yale University, a nonstock corporation specially chartered by the General Assembly of the Colony and State of Connecticut. Yale University is a private, not-for-profit university, whose tax-exempt status is recognized by the IRS determination letter attached hereto. This letter is in support of the University's use of the self-guarantee financial test to demonstrate financial assurance, as specified in 10 CFR Parts 30 and 70. The University has no parent company holding majority control of its voting stock.

The University guarantees, through the self-guarantee submitted to demonstrate compliance under 10 CFR Parts 30 and 70, the decommissioning of the following facilities owned or operated by the University. The current cost estimates or certified amounts for decommissioning, so guaranteed, are shown for each facility:

<u>Name of Facility</u>	<u>License Numbers</u>	<u>Location of Facility</u>	<u>Certified Amounts or Current Cost Estimates</u>
Yale University campuses	06-00183-03 (Broadscope License)	New Haven, CT/ West Haven-Orange, CT/ 34 Park St., New Haven, CT	\$1,055,726
Yale University PET Research Center Cyclotron	06-00183-08 (PET Accelerator Production License)	801 Howard Avenue New Haven, CT 06520-8048	\$227,317

I hereby certify that Yale University is currently a going concern, and that it possessed positive net assets in the amount of no less than \$28 billion at June 30, 2017.

The University is not required to file a Form 10-K with the U.S. Securities and Exchange Commission for the latest fiscal year.

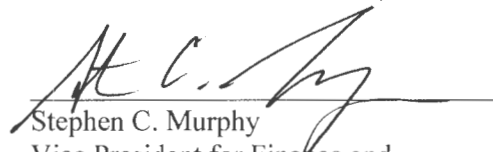
The University satisfies the following self-guarantee test.

610070/610071  
NMSS/RGNI MATERIALS-002

- (a) A current rating for its most recent uninsured, uncollateralized, and unencumbered bond issuance of AAA, AA, or A as issued by Standard & Poor's or Aaa, Aa, or A as issued by Moody's.

YALE BOND ISSUANCE CREDIT RATINGS						
Series	Amount	Moody's Rating	S&P Rating	Date of Issuance	Date of Maturity	Rating "A" or better?
2014A	\$250 million	Aaa	AAA	07/23/2014	07/01/2048	Yes
2013A	\$100 million	Aaa	AAA	07/21/2016	07/01/2042	Yes
2016A	\$399,320,000	Aaa	AAA	07/01/2016	07/01/2042	Yes
2017 A-1	\$85,460,000	Aaa	AAA	06/07/2017	07/01/2042	Yes
2017 A-2	\$85,460,000	Aaa	AAA	06/07/2017	07/01/2042	Yes
2017 B-1	\$112,100,000	Aaa	AAA	06/07/2017	07/01/2029	Yes
2017 B-2	\$112,100,000	Aaa	AAA	06/07/2017	07/01/2037	Yes
2017 C-1	\$123,270,000	Aaa	AAA	12/22/2017	07/01/2040	Yes
2017 C-2	\$260,110,000	Aaa	AAA	12/22/2017	07/01/2057	Yes
X-2	\$125,000,000	Aaa	AAA	02/01/2018	07/01/2037	Yes
2010A-3	\$150,000,000	Aaa	AAA	02/08/2018	07/01/2049	Yes
2015A	\$300,000,000	Aaa	AAA	07/11/2018	07/01/2035	Yes
2018A	\$67,610,000	Aaa	AAA	07/02/2018	07/01/2025	Yes

I hereby certify that the content of this letter is true and correct to the best of my knowledge.

  
 Stephen C. Murphy  
 Vice President for Finance and  
 Chief Financial Officer

# S&P Global Ratings

225 Franklin Street, 15th  
Floor  
Boston, MA 02110-2804  
tel 617 530-8338  
reference no.:864955

May 21, 2018

Yale University  
55 Whitney Ave  
5th Floor  
New Haven, CT 06510  
Attention: Mr. Alex Banker, Director

Re: *US\$300,000,000 Connecticut Health & Educational Facilities Authority, Connecticut, Revenue Bonds Remarketed, (Yale University), Series 2015A, dated: Date of delivery, due: July 1, 2035*  
*US\$70,000,000 Connecticut Health & Educational Facilities Authority, Connecticut, Revenue Bonds, (Yale University), Series 2018A, dated: Date of delivery, due: July 1, 2025*

Dear Mr. Banker:

Pursuant to your request for an S&P Global Ratings rating on the above-referenced obligations, S&P Global Ratings has assigned a rating of "AAA". S&P Global Ratings views the outlook for this rating as stable. A copy of the rationale supporting the rating is enclosed.

This letter constitutes S&P Global Ratings' permission for you to disseminate the above-assigned ratings to interested parties in accordance with applicable laws and regulations. However, permission for such dissemination (other than to professional advisors bound by appropriate confidentiality arrangements) will become effective only after we have released the rating on [standardandpoors.com](http://standardandpoors.com). Any dissemination on any Website by you or your agents shall include the full analysis for the rating, including any updates, where applicable.

To maintain the rating, S&P Global Ratings must receive all relevant financial and other information, including notice of material changes to financial and other information provided to us and in relevant documents, as soon as such information is available. Relevant financial and other information includes, but is not limited to, information about direct bank loans and debt and debt-like instruments issued to, or entered into with, financial institutions, insurance companies and/or other entities, whether or not disclosure of such information would be required under S.E.C. Rule 15c2-12. You understand that S&P Global Ratings relies on you and your agents and advisors for the accuracy, timeliness and completeness of the information submitted in connection with the rating and the continued flow of material information as part of the surveillance process. Please send all information via electronic delivery to: [pubfin\\_statelocalgovt@spglobal.com](mailto:pubfin_statelocalgovt@spglobal.com). If SEC rule 17g-5 is applicable, you may post such information on the appropriate website. For any information not available in electronic format or posted on the applicable website,

Please send hard copies to:

S&P Global Ratings  
Public Finance Department  
55 Water Street  
New York, NY 10041-0003

The rating is subject to the Terms and Conditions, if any, attached to the Engagement Letter applicable to the rating. In the absence of such Engagement Letter and Terms and Conditions, the rating is subject to the attached Terms and Conditions. The applicable Terms and Conditions are incorporated herein by reference.

S&P Global Ratings is pleased to have the opportunity to provide its rating opinion. For more information please visit our website at [www.standardandpoors.com](http://www.standardandpoors.com). If you have any questions, please contact us. Thank you for choosing S&P Global Ratings.

Sincerely yours,

S&P Global Ratings  
a division of Standard & Poor's Financial Services LLC

mb  
enclosures

cc: ***Mr. Bryan Boeckmann***  
***Mr. Michael Morris***

# S&P Global Ratings

## S&P Global Ratings Terms and Conditions Applicable To Public Finance Credit Ratings

General. The credit ratings and other views of S&P Global Ratings are statements of opinion and not statements of fact. Credit ratings and other views of S&P Global Ratings are not recommendations to purchase, hold, or sell any securities and do not comment on market price, marketability, investor preference or suitability of any security. While S&P Global Ratings bases its credit ratings and other views on information provided by issuers and their agents and advisors, and other information from sources it believes to be reliable, S&P Global Ratings does not perform an audit, and undertakes no duty of due diligence or independent verification, of any information it receives. Such information and S&P Global Ratings' opinions should not be relied upon in making any investment decision. S&P Global Ratings does not act as a "fiduciary" or an investment advisor. S&P Global Ratings neither recommends nor will recommend how an issuer can or should achieve a particular credit rating outcome nor provides or will provide consulting, advisory, financial or structuring advice. Unless otherwise indicated, the term "issuer" means both the issuer and the obligor if the obligor is not the issuer.

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No Third Party Beneficiaries. Nothing in any credit rating engagement, or a credit rating when issued, is intended or should be construed as creating any rights on behalf of any third parties, including, without limitation, any recipient of a credit rating. No person is intended as a third party beneficiary of any credit rating engagement or of a credit rating when issued.

# MOODY'S

## INVESTORS SERVICE

7 World Trade Center  
250 Greenwich Street  
New York 10007  
[www.moodys.com](http://www.moodys.com)

June 28, 2018

Mr. Alex Banker  
Yale University  
55 Whitney Avenue  
New Haven, CT 06510

Dear Mr. Banker:

We wish to inform you that Moody's Investors Service has assigned a rating of **Aaa** with a **stable** outlook to Yale University's Revenue Bonds, Yale University Issue, Series 2018A. In addition, Moody's maintains a rating of **Aaa** on Yale's Revenue Bonds, Yale University Issue, Series 2015A, in conjunction with a proposed remarketing to a new term rate period of three years or greater. The series are expected to be issued and remarketed through the State of Connecticut Health and Educational Facilities Authority.

Credit ratings issued by Moody's Investors Service, Inc. and its affiliates ("Moody's") are Moody's current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities and are not statements of current or historical fact. Moody's credit ratings address credit risk only and do not address any other risk, including but not limited to: liquidity risk, market value risk, or price volatility.

This letter uses capitalized terms and rating symbols that are defined or referenced either in *Moody's Definitions and Symbols Guide* or *MIS Code of Professional Conduct* as of the date of this letter, both published on [www.moodys.com](http://www.moodys.com). The Credit Ratings will be publicly disseminated by Moody's through normal print and electronic media as well as in response to verbal requests to Moody's Rating Desk. Moody's related research and analyses will also be published on [www.moodys.com](http://www.moodys.com) and may be further distributed as otherwise agreed in writing with us.

Moody's Credit Ratings or any corresponding outlook, if assigned, will be subject to revision, suspension or withdrawal, or may be placed on review, by Moody's at any time, without notice, in the sole discretion of Moody's. For the most current Credit Rating, please visit [www.moodys.com](http://www.moodys.com).

Moody's has not consented and will not consent to being named as an expert under applicable securities laws, such as section 7 of the Securities Act of 1933. The assignment of a rating does not create a fiduciary relationship between Moody's and you or between Moody's and other recipients of a Credit Rating. Moody's Credit Ratings are not and do not provide investment advice or recommendations to purchase, sell or hold particular securities. Moody's issues Credit Ratings with the expectation and understanding that each investor will make its own evaluation of each security that is under consideration for purchase, sale or holding.

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June 28, 2018

Mr. Alex Banker  
Yale University  
55 Whitney Avenue  
New Haven, CT 06510

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If there is a conflict between the terms of this rating letter and any related Moody's rating application, the terms of the executed rating application will govern and supercede this rating letter.

Should you have any questions regarding the above, please do not hesitate to contact the analyst assigned to this transaction, Susan Shaffer at 212-553-4132.

Sincerely,

*Moody's Investors Service Inc.*

Moody's Investors Service Inc.

cc: Brian Boeckman, CFA  
Barclays  
745 7<sup>th</sup> Avenue  
New York, NY 10019





ACKNOWLEDGEMENT - RECEIPT OF CORRESPONDENCE

Name and Address of Applicant and/or Licensee

Yale University  
ATTN: Ben Polak, Ph.D., Yale University Provost  
135 College Street, 1st Floor, Suite 100  
Radiation Safety Section-OEHS  
New Haven, CT 06510-2411

Date

October 2, 2018

License Number(s)

06-00183-03

Mail Control Number(s)

610070

Licensing and/or Technical Reviewer or Branch

Commercial, Industrial, R&D, & Academic Branch  
Financial Assurance

This is to acknowledge receipt of your: ☒ Letter and/or ☐ Application Dated: 09/21/2018

The initial processing, which included an administrative review, has been performed.

☐ Amendment ☐ Termination ☐ New License ☐ Renewal

☒ There were no administrative omissions identified during our initial review.

☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

☐ Your application for a new NRC license did not include your taxpayer identification number. Please complete and submit NRC Form 531, Request for Taxpayer Identification Number, located at the following link: <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>  
Follow the instructions on the form for submission.

☐ The following administrative omissions have been identified:

Your application has been assigned the above listed MAIL CONTROL NUMBER. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region I  
U. S. Nuclear Regulatory Commission  
Division of Nuclear Materials Safety  
2100 Renaissance Boulevard, Suite 100  
King of Prussia, PA 19406-2713  
(610) 337-5260, (610) 337-5313,  
(610) 337-5398, or (610) 337-5239



## ACKNOWLEDGEMENT - RECEIPT OF CORRESPONDENCE

## Name and Address of Applicant and/or Licensee

Yale University  
ATTN: Stephanie S. Spangler, M.D., Deputy  
Provost for Health Affairs & Academic  
Integrity  
Environmental Health and Safety  
135 College St., First Floor, Suite 100  
New Haven, CT 06510

## Date

October 2, 2018

## License Number(s)

06-00183-08

## Mail Control Number(s)

610071

## Licensing and/or Technical Reviewer or Branch

Commercial, Industrial, R&D, & Academic Branch  
Financial Assurance

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Follow the instructions on the form for submission.

☐ The following administrative omissions have been identified:

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Region I  
U. S. Nuclear Regulatory Commission  
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2100 Renaissance Boulevard, Suite 100  
King of Prussia, PA 19406-2713  
(610) 337-5260, (610) 337-5313,  
(610) 337-5398, or (610) 337-5239