# MACK CALI REALTY CORP Form SC 13G February 07, 2018

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No.)\*

NAME OF ISSUER: Mack-Cali Realty Corporation

TITLE OF CLASS OF SECURITIES: Real Estate Investment Trust

CUSIP NUMBER: 554489104

DATE OF EVENT WHICH REQUIRES FILING OF THIS STATEMENT: December 31, 2017

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

[X] Rule 13d-1(b)
[ ] Rule 13d-1(c)
[ ] Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be 'filed' for the purpose of Section 18 of the Securities Exchange Act of 1934 ('Act') or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP NUMBER: 554489104

- (1) Names of Reporting Persons The Bank of New York Mellon Corporation IRS Identification Nos. of Above Persons IRS No.13-2614959
- (2) Check the Appropriate Box if a Member of a Group (See Instructions)
  (a) ( ) (b) ( )
- (3) SEC use only
- (4) Citizenship or Place of Organization New York

Number of Shares (5) Sole Voting Power 5,732,658
Beneficially
Owned by Each (6) Shared Voting Power 0
Reporting Person
With (7) Sole Dispositive Power 6,988,775

(8) Shared Dispositive Power 717,544

(9) Aggregate Amount Beneficially Owned
 by Each Reporting Person 7,722,021

(10) Check if the Aggregated Amount in Row (9) Excludes Certain

Shares (see Instructions)			( )
(11) Percent of Class Represen	ited by	Amount in Row (9)	8.59%
(12) Type of Reporting Person	(See ]	Instructions)	НС
CUSIP NUMBER: 554489104			
(1) Names of Reporting Per	sons	CenterSquare Investm	ent Management
IRS Identification Nos	. of <i>I</i>	Holdings, Inc. Above Persons IRS	No.59-2830996
(2) Check the Appropriate (a) ( ) (b) ( )	Box if	a Member of a Group (See	Instructions)
(3) SEC use only			
(4) Citizenship or Place o	of Orga	nization	Pennsylvania
Number of Shares	(5)	Sole Voting Power	3,789,940
Beneficially Owned by Each	(6)	Shared Voting Power	0
Reporting Person With	(7)	Sole Dispositive Power	5,369,610
	(8)	Shared Dispositive Power	717,390
(9) Aggregate Amount Benefici by Each Reporting Person	ally (	)wned	6,087,000
(10) Check if the Aggregated A Shares (see Instructions)		in Row (9) Excludes Certa	in ( )
(11) Percent of Class Represen	ited by	Amount in Row (9)	6.77%
(12) Type of Reporting Person	(See 1	Instructions)	IA
CUSIP NUMBER: 554489104			
(1) Names of Reporting Per IRS Identification Nos		CenterSquare Investment M. Above Persons IRS	anagement, Inc
(2) Check the Appropriate (a) ( ) (b) ( )	Box if	a Member of a Group (See	Instructions)
(3) SEC use only			
(4) Citizenship or Place of	of Orga	nization	
Number of Shares	(5)	Sole Voting Power	3,789,940
Beneficially Owned by Each	(6)	Shared Voting Power	0
Reporting Person With	(7)	Sole Dispositive Power	5,369,610
	(8)	Shared Dispositive Power	717,390
(9) Aggregate Amount Benefici by Each Reporting Person	ally (	)wned	6,087,000

(10) Check if the Aggregated Amount in Row (9) Excludes Certain Shares (see Instructions) ( ) (11) Percent of Class Represented by Amount in Row (9) 6.77% (12) Type of Reporting Person (See Instructions) ΙA SCHEDULE 13G Item 1(a) Name of Issuer: Mack-Cali Realty Corporation Item 1(b) Address of Issuer's Principal Executive Office: Harborside 3, 210 Hudson St., Ste. 400 Jersey City, New Jersey 07311 United States Item 2(a) Name of Person Filing: The Bank of New York Mellon Corporation and any other reporting person(s) identified on the second part of the cover page(s) and Exhibit I Address of Principal Business Office, or if None, Residence: Item 2(b) C/O The Bank of New York Mellon Corporation 225 Liberty Street New York, New York 10286 (for all reporting persons) Item 2(c) Citizenship: See cover page and Exhibit I Title of Class of Securities: Item 2(d) Real Estate Investment Trust CUSIP Number 554489104 Item 3 See Item 12 of cover page(s) ("Type of Reporting Person ") for each reporting person. Symbol Category Broker or Dealer registered under Section 15 of the Securities Exchange Act of 1934 Bank as defined in Section 3(a)(6) of the Securities ВK Exchange Act of 1934 Investment Company registered under Section 8 of the ΤV Investment Company Act of 1940 ΙA Investment Advisor registered under Section 203 of the Investment Advisors Act of 1940 EР Employee Benefit Plan, Pension Fund which is subject to the provisions of the Employee Retirement Income Security Act of 1974 or Endowment Fund; see Section 240.13 - d(1)(b)(1)(ii)(F)= Parent Holding Company, in accordance with Section HC. 240.13-d(1)(b)(1)(ii)(G) Item 4 Ownership: See Item 5 through 9 and 11 of cover page(s)

as to each reporting person.

The amount beneficially owned includes, where appropriate, securities not outstanding which are subject to options, warrants, rights or conversion privileges that are exercisable within 60 days. The securities reported herein as beneficially owned may exclude securities of the issuer with respect to which voting and/or dispositive power is exercised by subsidiaries of The Bank of New York Mellon Corporation, or departments or units thereof, independently from the exercise of those powers over the securities reported herein. See SEC Release No. 34-39538 (January 12, 1998). The filing of this Schedule 13G shall not be construed as an admission that The Bank of New York Mellon Corporation, or its direct or indirect subsidiaries, including The Bank of New York Mellon and BNY Mellon, National Association, are for the purposes of Section 13(d) or 13(g) of the Act, the beneficial owners of any securities covered by this Schedule 13G.

The following information applies if checked: ( ) The Bank of New York Mellon and/or ( ) The Bank of New York Mellon Trust Company, National Association is/are the trustee of the issuer's employee benefit plan (the Plan), which is subject to ERISA. The securities reported include all shares held of record by such reporting person(s) as trustee of the Plan which have not been allocated to the individual accounts of employee participants in the Plan. The reporting person, however, disclaims beneficial ownership of all shares that have been allocated to the individual accounts of employee participants in the Plan for which directions have been received and followed.

Item 5 Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following ()

Item 6 Ownership of More than Five Percent on Behalf of Another Person:

All of the securities are beneficially owned by The Bank of New York Mellon Corporation and its direct or indirect subsidiaries in their various fiduciary capacities. As a result, another entity in every instance is entitled to dividends or proceeds of sale. The number of individual accounts holding an interest of 5% or more is ( )

- Item 7 Identification and Classification of the Subsidiary Which Acquired
   the Security Being Reported by the Parent Holding Company:
   See Exhibit I.
- Item 8 Identification and Classification of Members of the Group: N/A
- Item 9 Notice of Dissolution of Group: N/A

#### Item 10 Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired and are not held in connection with or as a participant in any transaction having such purpose or effect.

#### SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct. This filing is signed by The Bank of New York

Mellon Corporation on behalf of all reporting entities pursuant to Rule 13d-1(k) (1) promulgated under the Securities and Exchange Act of 1934, as amended.

Date: February 07, 2018

THE BANK OF NEW YORK MELLON CORPORATION

By: /s/ IVAN R. ARIAS

Ivan R. Arias
Attorney-In-Fact

#### EXHIBIT I

The shares reported on the attached Schedule 13G are beneficially owned by the following direct or indirect subsidiaries of The Bank of New York Mellon Corporation, as marked (X):

- (A) The Item 3 classification of each of the subsidiaries listed below is "Item 3(b) Bank as defined in Section 3(a)(6) of the Act" (15 U.S.C. 78c) or "Item 3(j)A non-U.S. institution in accordance with Rule 240.13d-1 (b)(1)(ii)(J)"
  - (X) The Bank of New York Mellon (parent holding company of Mellon Overseas Investment Corporation; BNY International Financing Corporation; The Bank of New York Mellon SA/NV; Cutwater Holdings, LLC)
  - ( ) The Bank of New York Mellon Trust Company, National Association
  - (X) BNY Mellon, National Association
  - (X) BNY Mellon Trust of Delaware
  - (X) The Bank of New York Mellon SA/NV (parent holding company of BNY Mellon Service Kapitalanlage-Gesellschaft mbH)
- (B) The Item 3 classification of each of the subsidiaries listed below is "Item 3(e) An investment adviser in accordance with Section 240.13d-1 (b)(1)(ii)(E)" or "Item 3(j) A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J)"
  - ( ) ARX Investimentos Ltda (parent holding company of BNY Mellon Alocacao de Patrimonia Ltda.)
  - ( ) BNY Mellon Alocacao de Patrimonia Ltda
  - () BNY Mellon Servicos Financeiros Distribuidora de Titulos e Valores Mobiliarios S.A.(parent holding company of BNY Mellon Administracao de Ativos Ltda.)
  - ( ) BNY Mellon Administracao de Ativos Ltda.
  - ( ) The Boston Company Asset Management LLC
  - (X) The Dreyfus Corporation (parent holding company of MBSC Securities Corporation)
  - () Insight Investment Management (Global) Limited
  - ( ) Lockwood Advisors, Inc.
  - (X) Mellon Capital Management Corporation
  - ( ) Newton Investment Management (North America) Limited
  - ( ) Newton Investment Management Limited
  - ( ) Standish Mellon Asset Management Company LLC
  - (X) CenterSquare Investment Management Holdings, Inc.(parent holding company of CenterSquare Investment Management, Inc.)
  - (X) CenterSquare Investment Management, Inc.
  - ( ) Walter Scott & Partners Limited
  - ( ) BNY Mellon Wealth Management, Advisory Services, Inc.
  - ( ) BNY Mellon Trust Company (Cayman) Limited
  - ( ) BNY Mellon Investment Management Cayman Limited

- ( ) Cutwater Asset Management Corporation
- ( ) Cutwater Investor Services Corporation
- ( ) Pareto Investment Management Limited
- ( ) BNY Mellon Asset Management Japan Limited
- (C) The Item 3 classification of each of the subsidiaries listed below is "Item 3(a) Broker or dealer registered under Section 15 of the Act" (15 U.S.C. 78c) or "Item 3(j) A non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J)"
  - (X) BNY Mellon Capital Markets, LLC
  - ( ) MBSC Securities Corporation
  - (X) Pershing LLC
- (D) The Item 3 classification of each of the subsidiaries listed below is "Item 3(g) a parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G)"
  - (X) The Bank of New York Mellon Corporation
  - (X) B.N.Y. Holdings (Delaware) Corporation (parent holding company of BNY Mellon Trust of Delaware)
  - (X) BNY Mellon IHC, LLC (as parent holding company of MBC Investments Corporation)
  - (X) MBC Investments Corporation (parent holding company of Mellon Capital Management Corporation; BNY Mellon Investment Management (Jersey) Ltd.; BNY Mellon Investment Management APAC LP; Standish Mellon Asset Management Company LLC; The Boston Company Asset Management LLC; The Dreyfus Corporation; ARX Investimentos Ltda. - Brazil
  - ( ) BNY Mellon Investment Management (Jersey) Ltd. (parent holding company of BNY Mellon Investment Management (Europe) Ltd.)
  - () BNY Mellon Investment Management (Europe) Ltd. (parent holding company of BNY Mellon Investment Management Europe Holdings Ltd.;
    BNY Mellon Investment Management Cayman Ltd.)
  - ( ) BNY Mellon Investment Management Europe Holdings Ltd. (parent holding company of BNY Mellon International Asset Management Group Limited)
  - () BNY Mellon International Asset Management Group Limited (parent holding company of Newton Management Limited; BNY Mellon International Asset Management (Holdings) Limited; Insight Investment Management Limited)
  - ( ) Newton Management Limited (parent holding company of Newton Investment Management (North America) Limited; Newton Investment Management Limited)
  - () BNY Mellon International Asset Management (Holdings) Limited (parent holding company of BNY Mellon International Asset Management (Holdings) No. 1 Limited)
  - () BNY Mellon International Asset Management (Holdings) No. 1 Limited (parent holding company of Walter Scott & Partners Limited)
  - ( ) Insight Investment Management Limited (parent holding company of Insight Investment Management (Global) Limited; Pareto Investment Management Limited)
  - ( ) BNY Mellon Investment Management APAC LP (Parent holding company of BNY Mellon Investment Management (APAC) Holdings Limited
  - ( ) BNY Mellon Investment Management (APAC) Holdings Limited (parent holding company of BNY Mellon Asset Management Japan Limited)
  - (X) Pershing Group LLC (parent holding company of Lockwood Advisors, Inc; Pershing LLC)
  - ( ) Mellon Overseas Investment Corporation (parent holding company of Mellon Canada Holding Company; BNY Mellon Participacoes Ltda.)
  - ( ) Mellon Canada Holding Company (parent holding company of BNY Mellon Wealth Management, Advisory Services, Inc)
  - ( ) BNY Mellon Participacoes Ltda. (parent holding company of BNY Mellon Servicos Financeiros Distribuidora de Titulos e Valores Mobiliarios

S.A.)

- ( ) BNY International Financing Corporation (parent holding company of BNY Mellon Trust Company (Cayman) Limited)
- ( ) Cutwater Holdings LLC (parent holding company of Cutwater Asset Management Corporation; Cutwater Investor Services Corporation)
- (X) BNY Capital Markets Holdings, Inc. (parent holding company of BNY Mellon Capital Markets, LLC)

NOTE: ALL OF THE LEGAL ENTITIES LISTED UNDER (A), (B), (C) AND (D) ABOVE ARE DIRECT OR INDIRECT SUBSIDIARIES OF THE BANK OF NEW YORK MELLON CORPORATION. BENEFICIAL OWNERSHIP OF MORE THAN FIVE PERCENT OF THE CLASS BY ANY ONE OF THE SUBSIDIARIES OR INTERMEDIATE PARENT HOLDING COMPANIES LISTED ABOVE IS REPORTED ON A JOINT REPORTING PERSON PAGE FOR THAT SUBSIDIARY ON THE ATTACHED SCHEDULE 13G AND IS INCORPORATED IN THE TOTAL PERCENT OF CLASS REPORTED ON THE BANK OF NEW YORK MELLON CORPORATION'S REPORTING PERSON PAGE. (DO NOT ADD THE SHARES OR PERCENT OF CLASS REPORTED ON EACH JOINT REPORTING PERSON PAGE ON THE ATTACHED SCHEDULE 13G TO DETERMINE THE TOTAL PERCENT OF CLASS FOR THE BANK OF NEW YORK MELLON CORPORATION).

#### POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each of the undersigned (each a "Company") does hereby make, constitute and appoint each of Nicholas R. Darrow, Ivan Arias and Andrew Weiser (and any other employee of The Bank of New York Mellon Corporation, or one of its affiliates, associated with the Global Holdings Reporting Group and designated in writing by one of the attorneys-in-fact), acting individually, its true and lawful attorney to execute and deliver in its name and on its behalf, whether the Company is acting individually or as representative of others, any and all filings, be they written or oral, required to be made by the Company with respect to securities which may be deemed to be beneficially owned by the Company or under the Company's investment discretion under:

\*the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including those filings required to be submitted on Form 13F, Schedule 13G, Schedule 13D and Forms 3, 4 and 5, and

\*the laws of any jurisdiction other than the United States of America, including those filings made to disclose securities holdings as required to be submitted to regulatory agencies, exchanges and/or issuers,

giving and granting unto each said attorney-in-fact power and authority to correspond with issuers, regulatory authorities, and other entities as is required in support of the filings referenced above, and to act in the premises as fully and to all intents and purposes as the Company might or could do to comply with the applicable regulations if personally present by one of its authorized signatories (including, but not limited to, instructing local counsel on a Company's behalf), hereby ratifying and confirming all that said attorney-in-fact shall lawfully do or cause

THIS POWER OF ATTORNEY shall remain in full force and effect until either revoked in writing by the Company or until such time as the person or to whom power of attorney has been hereby granted cease(s) to be an persons employee of The Bank of New York Mellon Corporation or one of its affiliates.

This Power of Attorney may be executed in any number of counterparts

all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned hereby execute this Agreement effective as of the date set forth below.

\_\_\_\_\_ Banks/Bank Holding Companies THE BANK OF NEW YORK MELLON BNY MELLON, NATIONAL ASSOCIATION CORPORATION By: /S/ DONALD HEBERLE By: /S/ MITCHELL E.HARRIS -----\_\_\_\_\_ Mitchell E. Harris Donald Heberle Chief Executive Officer, Chief Executive Officer Investment Management Date: March 17, 2017 Date: September 16, 2015 THE BANK OF NEW YORK MELLON SA/NV BNY MELLON, NATIONAL ASSOCIATION By: /S/ THOMAS J. DICKER By: /S/ LAURA AHTO \_\_\_\_\_ \_\_\_\_\_ Thomas J. Dicker Laura Ahto Chief Operating Officer Chief Executive Officer Date: October 9, 2015 Date: May 17, 2016 THE BANK OF NEW YORK MELLON THE BANK OF NEW YORK MELLON By: /S/ MITCHELL E. HARRIS By: /S/ CURTIS ARLEDGE Mitchell E. Harris Curtis Arledge Senior Executive Vice President Vice Chairman Date: September 18, 2015 Date: August 26, 2015 THE BANK OF NEW YORK MELLON TRUST THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION COMPANY, NATIONAL ASSOCIATION By: /S/ ANTONIO PORTUONDO By: /S/ KURTIS R. KURIMSKY Antonio Portuondo Kurtis R. Kurimsky President Executive Vice President Date: October 20, 2015 Date: March 8, 2016 BNY MELLON TRUST OF DELAWARE BNY MELLON TRUST OF DELAWARE By: /S/ JAMES P. AMBAGIS By: /S/ LEE JAMES WOOLLEY \_\_\_\_\_ \_\_\_\_\_ James P. Ambagis Lee James Woolley President Chairman and Chief Executive Officer Date: October 21, 2015 Date: October 19, 2015

Investment Advisers and/or Broker-Dealers

PERSHING LLC

BNY MELLON CAPITAL MARKETS, LLC

By: /S/ CLAIRE SANTANIELLO

\_\_\_\_\_

Claire Santaniello

Chief Administrative Officer

and Chief Risk Officer

Date: May 24, 2016

ARX INVESTIMENTOS LTDA

By: /S/ CAMILA SOUZA

\_\_\_\_\_

Camila Souza Director

Date: January 4, 2016

BNY MELLON SERVICOS FINANCEIROS BNY MELLON SERVICOS FINANCEIROS
DISTRIBUIDORA DE TITULOS E VALORES

MOBILIARIOS S.A.

\_\_\_\_\_

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON ADMINISTRAÇÃO DE ATIVOS

LTDA

By: /S/ CARLOS ALBERTO SARAIVA

\_\_\_\_\_

Carlos Alberto Saraiva

Director

Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO

LTDA

By: /S/ GUSTAVO CASTELLO BRANCO

Gustavo Castello Branco

Director

Date: January 4, 2016

THE BOSTON COMPANY ASSET MANAGEMENT

LLC

By: /S/ BART GRENIER

Bart Grenier

Chairman and

Chief Executive Officer

Date: July 16, 2015

THE DREYFUS CORPORATION

By: /S/ JEFF GEARHART

\_\_\_\_\_

Jeff Gearhart

Chief Operating Officer

Date: October 19, 2016

ARX INVESTIMENTOS LTDA

By: /S/ GUILHERME ABRY

\_\_\_\_\_

Guilherme Abry Director

Date: January 4, 2016

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES

MOBILIARIOS S.A.

By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

\_\_\_\_\_

Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

BNY MELLON ADMINISTRACAO DE ATIVOS

LTDA

By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

\_\_\_\_\_

Marcus Vinicius Mathias Pereira

Director

Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO

LTDA

By: /S/ CAMILA SOUZA

Camila Souza

Director

Date: January 4, 2016

BNY MELLON ASSET MANAGEMENT JAPAN

LIMITED

By: /S/ SHIZU KISHIMOTO

Shizu Kishimoto

Representative Director

and President Date: August 5, 2015

INSIGHT INVESTMENT MANAGEMENT

(GLOBAL) LIMITED

By: /S/ JAMES BITETTO

\_\_\_\_\_

James Bitetto Secretary

Date: July 30, 2015

LOCKWOOD ADVISORS, INC.

By: /S/ JOHN J. BRETT

\_\_\_\_\_\_

John J. Brett Chairman

Date: July 30, 2015

MELLON CAPITAL MANAGEMENT

CORPORATION

By: /S/ W. CHRISTOPHER APPLER By: /S/ KENNETH J. BRADLE

\_\_\_\_\_ W. Christopher Appler

Managing Director and Chief Compliance Officer

Date: August 4, 2015

NEWTON INVESTMENT MANAGEMENT LIMITED

By: /S/ JAMES HELBY

\_\_\_\_\_

James Helby Director

Date: July 17, 2015

CENTERSQUARE INVESTMENT MANAGEMENT

HOLDINGS, INC.

By: /S/ R. JOSEPH LAW

R. Joseph Law

Chief Financial Officer and Chief Compliance Officer

Date: July 15, 2015

WALTER SCOTT & PARTNERS LIMITED

By: /S/ RODGER NISBET

Rodger Nisbet Executive Chairman

Date: July 15, 2015

ADVISORY SERVICES, INC.

By: /s/ CHARLES FARQUHARSON

\_\_\_\_\_

Charles Farguharson Chief Risk Officer

Date: February 16, 2016

STANDISH MELLON ASSET MANAGEMENT

COMPANY LLC

By: /S/ DAVID LEDUC

\_\_\_\_\_

David Leduc

Chief Executive Officer and Chief Investment Officer

Date: October 23, 2015

MBSC SECURITIES CORPORATION

\_\_\_\_\_

Kenneth J. Bradle

President

Date: April 29, 2016

NEWTON INVESTMENT MANAGEMENT

(NORTH AMERICA) LIMITED

By: /S/ JAMES HELBY

\_\_\_\_\_

James Helby Chief Risk Officer

Date: June 30, 2016

CENTERSQUARE INVESTMENT MANAGEMENT,

INC.

By: /S/ R. JOSEPH LAW

R. Joseph Law

Chief Financial Officer and

Chief Compliance Officer

Date: July 15, 2015

PARETO INVESTMENT MANAGEMENT LIMITED

By: /S/ CHARLES FARQUHARSON

Charles Farquharson Chief Risk Officer

Date: February 16, 2016

BNY MELLON WEALTH MANAGEMENT, BNY MELLON INVESTMENT MANAGEMENT

CAYMAN LTD

By: /S/ BRENDON J. DONNELLAN By: /S/ MARIE-CLAUDE LEPAGE \_\_\_\_\_ \_\_\_\_\_ Marie-Claude Lepage Brendon J.Donnellan Chief Compliance Officer Date: May 9, 2016 Date: August 22, 2016 BNY MELLON TRUST COMPANY BNY MELLON TRUST COMPANY (CAYMAN) LIMITED (CAYMAN) LIMITED By: CANELLA SECRETARIES By: CANELLA SECRETARIES (CAYMAN) LTD, SECRETARY (CAYMAN) LTD, SECRETARY By: /S/GILLIAN NELSON By: /S/ PATRICIA BRUZIO \_\_\_\_\_ \_\_\_\_\_ Gillian Nelson Patricia Bruzio Authorized Person Authorized Person Date: May 17, 2016 Date: May 17, 2016 CUTWATER INVESTOR SERVICES CUTWATER ASSET MANAGEMENT CORPORATION CORPORATION By: /S/ CLIFFORD CORSO By: /S/ CLIFFORD CORSO \_\_\_\_\_ \_\_\_\_\_ Clifford Corso Clifford Corso Chief Executive Officer Chief Executive Officer Date: March 16, 2015 Date: March 16, 2015 Parent Holding Companies/Control Persons \_\_\_\_\_\_ B.N.Y. HOLDINGS (DELAWARE) CORPORATION PERSHING GROUP LLC By: /S/ CLAIRE SANTANIELLO By: /S/ JAMES P. AMBAGIS \_\_\_\_\_ James P. Ambagis Claire Santaniello President Chief Administrative Officer and Chief Risk Officer Date: October 21, 2015 Date: May 11, 2016 BNY MELLON INVESTMENT MANAGEMENT BNY MELLON INVESTMENT MANAGEMENT (APAC) HOLDINGS LIMITED (APAC) HOLDINGS LIMITED By: /S/ EMILY CHAN By: /S/ DONI SHAMSUDDIN \_\_\_\_\_ \_\_\_\_\_ Emily Chan Doni Shamsuddin Director Director Date: April 19, 2016 Date: April 19, 2016 BNY MELLON INTERNATIONAL ASSET NEWTON MANAGEMENT LIMITED MANAGEMENT GROUP LIMITED By: /S/ GREG BRISK By: /S/ HELENA MORRISSEY \_\_\_\_\_ \_\_\_\_\_ Greg Brisk Helena Morrissey

Director

Director

Date: July 17, 2015 Date: October 21, 2015

BNY MELLON IHC, LLC

By: /S/ KURTIS R. KURIMSKY

-----

Kurtis R. Kurimsky Vice President and

Controller

Date: March 29, 2017

MELLON OVERSEAS INVESTMENT

CORPORATION

By: /S/ KURTIS R. KURIMSKY

-----Kurtis R. Kurimsky

Vice President and Controller

October 7 2015

Date: February 16 2016

Date: October 7, 2015

BNY INTERNATIONAL FINANCING

CORPORATION

By: /S/ KURTIS R. KURIMSKY

\_\_\_\_\_

Kurtis R. Kurimsky President and Comptroller

Date: May 12, 2016

BNY MELLON INVESTMENT MANAGEMENT

EUROPE HOLDINGS LIMITED

By: /S/ GREG BRISK

\_\_\_\_\_

Greg Brisk Director

Date: October 21, 2015

BNY MELLON INVESTMENT MANAGEMENT

(JERSEY) LIMITED

By: /S/ GREG BRISK

-----

Greg Brisk

Director

Date: October 21, 2015

BNY MELLON INTERNATIONAL ASSET

MANAGEMENT (HOLDINGS) LIMITED

By: /S/ GREG BRISK

-----

Greg Brisk

Director

Date: October 21, 2015 Date: October 21, 2015

MBC INVESTMENTS CORPORATION

By: /S/ PAUL A. GRIFFITHS

\_\_\_\_\_

Paul A. Griffiths

Chairman, President and Chief Executive Officer

Date: April 29, 2016

INSIGHT INVESTMENT MANAGEMENT

LIMITED

By: /S/ CHARLES FARQUHARSON

\_\_\_\_\_ Charles Farquharson

Date: February 16, 2016

BNY INTERNATIONAL FINANCING

CORPORATION

By: /S/ JOHN M. ROY

\_\_\_\_\_

John M. Roy

Vice President

Date: August 15, 2016

BNY MELLON INVESTMENT MANAGEMENT

(EUROPE) LIMITED

By: /S/ GREG BRISK

\_\_\_\_\_\_

Greg Brisk Director

Date: October 21, 2015

BNY CAPITAL MARKETS HOLDINGS, INC.

By: /S/ THOMAS P. GIBBONS

\_\_\_\_\_

Thomas P. Gibbons

Vice Chairman and Chief

Financial Officer

Date: October 24, 2015

BNY MELLON INTERNATIONAL ASSET

MANAGEMENT (HOLDINGS) No. 1 LIMITED

By: /S/ GREG BRISK

\_\_\_\_\_

Greg Brisk

Director

MELLON CANADA HOLDING COMPANY

By: /S/ KELLY SCHWARTZ

\_\_\_\_\_

Kelly Schwartz

President and Director

Date: May 3, 2016

BNY MELLON PARTICIPACOES LTDA

\_\_\_\_\_

Carlos Alberto Saraiva

Director Date: May 5, 2016

BNY MELLON INVESTMENT MANAGEMENT

By: BNY MELLON INVESTMENT MANAGEMENT HOLDINGS, LLC, GENERAL PARTNER

By: /S/ PAUL A. GRIFFITHS

\_\_\_\_\_

Paul A. Griffiths

President

Date: April 29, 2016

CUTWATER HOLDINGS, LLC

By: /S/ CLIFFORD CORSO

\_\_\_\_\_

Clifford Corso

Chief Executive Officer

Date: March 16, 2015

BNY MELLON PARTICIPACOES LTDA

By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA

\_\_\_\_\_

Marcus Vinicius Mathias Pereira

Director Date: May 5, 2016

Fund Administrators

BNY MELLON SERVICE KAPITALANLAGE-BNY MELLON SERVICE KAPITALANLAGE-GESELLSCHAFT mbH

By: /S/ KATARINA MELVAN -----

Katarina Melvan

Date: August 19, 2016

By: /S/ CAROLINE SPECHT

\_\_\_\_\_

Caroline Specht Managing Director Managing Director(Chairman) Managing Director
e: August 19, 2016 Date: August 19, 2016

#### JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the undersigned hereby agree to any and all joint filings required to be made on their behalf on Schedule 13G (including amendments thereto) under the Exchange Act, with respect to securities which may be deemed to be beneficially owned by them under the Exchange Act, and that this Agreement be included as an Exhibit to any such joint filing. This Agreement may be executed in any number of counterparts all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned hereby execute this Agreement effective as of the date set forth below.

Banks/Bank Holding Companies		
THE BANK OF NEW YORK MELLON CORPORATION	BNY MELLON, NATIONAL ASSOCIATION	
By: /S/ MITCHELL E.HARRIS	By: /S/ DONALD HEBERLE	
Mitchell E. Harris Chief Executive Officer, Investment Management	Donald Heberle Chief Executive Officer	
Date: March 17, 2017	Date: September 16, 2015	
BNY MELLON, NATIONAL ASSOCIATION	THE BANK OF NEW YORK MELLON SA/NV	
By: /S/ THOMAS J. DICKER	By: /S/ LAURA AHTO	
Thomas J. Dicker Chief Operating Officer Date: October 9, 2015	Laura Ahto Chief Executive Officer Date: May 17, 2016	
THE BANK OF NEW YORK MELLON	THE BANK OF NEW YORK MELLON	
By: /S/ MITCHELL E. HARRIS	By: /S/ CURTIS ARLEDGE	
Mitchell E. Harris Senior Executive Vice President Date: August 27, 2015	Curtis Arledge Vice Chairman Date: August 26, 2015	
sace. Magase 27, 2013	Bacc. Magase 20, 2013	
THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION	THE BANK OF NEW YORK MELLON TRUST COMPANY, NATIONAL ASSOCIATION	
By: /S/ ANTONIO PORTUONDO	By: /S/ KURTIS R. KURIMSKY	
Antonio Portuondo President Date: October 20, 2015	Kurtis R. Kurimsky Executive Vice President Date: March 8, 2016	
BNY MELLON TRUST OF DELAWARE	BNY MELLON TRUST OF DELAWARE	
By: /S/ JAMES P. AMBAGIS	By: /S/ LEE JAMES WOOLLEY	
James P. Ambagis President	Lee James Woolley Chairman and Chief Executive Officer	
Date: October 21, 2015	Date: October 19, 2015	
Investment Adviser	s and/or Broker-Dealers	
PERSHING LLC	BNY MELLON CAPITAL MARKETS, LLC	
By: /S/ CLAIRE SANTANIELLO	By: /S/ JEFF GEARHART	

ARX INVESTIMENTOS LTDA

Claire Santaniello Jeff Gearhart

Chief Administrative Officer Chief Operating Officer and Chief Risk Officer

Date: May 24, 2016 Date: October 19, 2016

ARX INVESTIMENTOS LTDA

By: /S/ CAMILA SOUZA By: /S/ GUILHERME ABRY

Camila Souza Guilherme Abry Director Director

Date: January 4, 2016 Date: January 4, 2016

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES

BNY MELLON SERVICOS FINANCEIROS DISTRIBUIDORA DE TITULOS E VALORES MOBILIARIOS S.A. MOBILIARIOS S.A.

By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA \_\_\_\_\_\_ Carlos Alberto Saraiva Marcus Vinicius Mathias Pereira Director Director

Date: May 5, 2016 Date: May 5, 2016

BNY MELLON ADMINISTRACAO DE ATIVOS BNY MELLON ADMINISTRACAO DE ATIVOS T.TDA LTDA

By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA \_\_\_\_\_ \_\_\_\_\_ Carlos Alberto Saraiva Marcus Vinicius Mathias Pereira Director Director

Date: May 5, 2016 Date: May 5, 2016

BNY MELLON ALOCACAO DE PATRIMONIO BNY MELLON ALOCACAO DE PATRIMONIO LTDA LTDA

By: /S/ GUSTAVO CASTELLO BRANCO By: /S/ CAMILA SOUZA Gustavo Castello Branco Camila Souza Director Director

Date: January 4, 2016 Date: January 4, 2016

THE BOSTON COMPANY ASSET MANAGEMENT BNY MELLON ASSET MANAGEMENT JAPAN LLC LIMITED

By: /S/ BART GRENIER By: /S/ SHIZU KISHIMOTO

\_\_\_\_\_ \_\_\_\_\_ Bart Grenier Shizu Kishimoto Chairman and Representative Director Chief Executive Officer and President

Date: July 16, 2015 Date: August 5, 2015

INSIGHT INVESTMENT MANAGEMENT THE DREYFUS CORPORATION (GLOBAL) LIMITED

By: /S/ JAMES BITETTO By: /s/ CHARLES FARQUHARSON

Charles Farquharson Chief Risk Officer

MBSC SECURITIES CORPORATION

By: /S/ R. JOSEPH LAW

Date: February 16, 2016

James Bitetto Secretary

Date: July 30, 2015

LOCKWOOD ADVISORS, INC. STANDISH MELLON ASSET MANAGEMENT

By: /S/ JOHN J. BRETT By: /S/ DAVI

/S/ JOHN J. BRETT By: /S/ DAVID LEDUC

John J. Brett David Leduc

Chairman Chief Executive Officer and Chief Investment Officer Date: July 30, 2015 Date: October 23, 2015

MELLON CAPITAL MANAGEMENT CORPORATION

By: /S/ R. JOSEPH LAW

CORFORATION

By: /S/ W. CHRISTOPHER APPLER

W. Christopher Appler

Managing Director and

By: /S/ KENNETH J. BRADLE

Kenneth J. Bradle

President

Chief Compliance Officer
Date: August 4, 2015
Date: April 29, 2016

NEWTON INVESTMENT MANAGEMENT LIMITED NEWTON INVESTMENT MANAGEMENT (NORTH AMERICA) LIMITED

By: /S/ JAMES HELBY

By: /S/ JAMES HELBY

James Helby
Director
Date: July 17, 2015

James Helby
Chief Risk Officer
Date: June 30, 2016

CENTERSQUARE INVESTMENT MANAGEMENT CENTERSQUARE INVESTMENT MANAGEMENT,

HOLDINGS, INC. INC.

R. Joseph Law
Chief Financial Officer and
Chief Compliance Officer

Chief Compliance Officer

R. Joseph Law
Chief Financial Officer and
Chief Compliance Officer

Date: July 15, 2015

Date: July 15, 2015

WALTER SCOTT & PARTNERS LIMITED PARETO INVESTMENT MANAGEMENT LIMITED

By: /S/ RODGER NISBET

Rodger Nisbet
Executive Chairman

By: /S/ CHARLES FARQUHARSON

Charles Farquharson
Chief Risk Officer

Executive Chairman Chief Risk Officer
Date: July 15, 2015 Date: February 16, 2016

BNY MELLON WEALTH MANAGEMENT, BNY MELLON INVESTMENT MANAGEMENT ADVISORY SERVICES, INC. CAYMAN LTD

By: /S/ MARIE-CLAUDE LEPAGE By: /S/ BRENDON J. DONNELLAN

-----

Marie-Claude Lepage Chief Compliance Officer

Date: May 9, 2016

Brendon J.Donnellan Director

Date: August 22, 2016

BNY MELLON TRUST COMPANY (CAYMAN) LIMITED

By: CANELLA SECRETARIES (CAYMAN) LTD, SECRETARY

By: /S/GILLIAN NELSON

\_\_\_\_\_

Gillian Nelson Authorized Person Date: May 17, 2016

CUTWATER INVESTOR SERVICES CORPORATION

By: /S/ CLIFFORD CORSO \_\_\_\_\_

> Clifford Corso Chief Executive Officer

Date: March 16, 2015

BNY MELLON TRUST COMPANY (CAYMAN) LIMITED

By: CANELLA SECRETARIES (CAYMAN) LTD, SECRETARY By: /S/ PATRICIA BRUZIO

-----

Patricia Bruzio Authorized Person Date: May 17, 2016

CUTWATER ASSET MANAGEMENT CORPORATION

By: /S/ CLIFFORD CORSO \_\_\_\_\_

Clifford Corso

Chief Executive Officer Date: March 16, 2015

\_\_\_\_\_\_ Parent Holding Companies/Control Persons

\_\_\_\_\_\_

B.N.Y. HOLDINGS (DELAWARE) CORPORATION PERSHING GROUP LLC

By: /S/ JAMES P. AMBAGIS

James P. Ambagis President

Date: October 21, 2015

By: /S/ CLAIRE SANTANIELLO

Claire Santaniello Chief Administrative Officer and Chief Risk Officer

Date: May 11, 2016

(APAC) HOLDINGS LIMITED

By: /S/ EMILY CHAN \_\_\_\_\_

Emily Chan Director

Date: April 19, 2016

BNY MELLON INVESTMENT MANAGEMENT BNY MELLON INVESTMENT MANAGEMENT (APAC) HOLDINGS LIMITED

> By: /S/ DONI SHAMSUDDIN \_\_\_\_\_

> > Doni Shamsuddin

Director

Date: April 19, 2016

BNY MELLON INTERNATIONAL ASSET MANAGEMENT GROUP LIMITED

By: /S/ GREG BRISK

-----

Greg Brisk Director

Date: October 21, 2015

NEWTON MANAGEMENT LIMITED

By: /S/ HELENA MORRISSEY \_\_\_\_\_

Helena Morrissey

Director

Date: July 17, 2015

BNY MELLON IHC, LLC MBC INVESTMENTS CORPORATION

By: /S/ KURTIS R. KURIMSKY

Kurtis R. Kurimsky Vice President and

Controller

Date: March 29, 2017

MELLON OVERSEAS INVESTMENT CORPORATION

By: /S/ KURTIS R. KURIMSKY \_\_\_\_\_

Kurtis R. Kurimsky

Date: October 7, 2015

BNY INTERNATIONAL FINANCING CORPORATION

By: /S/ KURTIS R. KURIMSKY \_\_\_\_\_

Kurtis R. Kurimsky President and Comptroller

Date: May 12, 2016

BNY MELLON INVESTMENT MANAGEMENT EUROPE HOLDINGS LIMITED

By: /S/ GREG BRISK

\_\_\_\_\_

Greg Brisk Director

Date: October 21, 2015

BNY MELLON INVESTMENT MANAGEMENT (JERSEY) LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

BNY MELLON INTERNATIONAL ASSET MANAGEMENT (HOLDINGS) LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

MELLON CANADA HOLDING COMPANY CUTWATER HOLDINGS, LLC

By: /S/ PAUL A. GRIFFITHS

Paul A. Griffiths Chairman, President and Chief Executive Officer

Date: April 29, 2016

INSIGHT INVESTMENT MANAGEMENT

LIMITED

By: /S/ CHARLES FARQUHARSON

\_\_\_\_\_

Charles Farquharson Vice President and Controller Chief Risk Officer

3: October 7, 2015

Date: February 16 2016 Date: February 16, 2016

> BNY INTERNATIONAL FINANCING CORPORATION

By: /S/ JOHN M. ROY

\_\_\_\_\_

John M. Roy Vice President Date: August 15, 2016

BNY MELLON INVESTMENT MANAGEMENT (EUROPE) LIMITED

By: /S/ GREG BRISK

\_\_\_\_\_

Greg Brisk Director

Date: October 21, 2015

BNY CAPITAL MARKETS HOLDINGS, INC.

By: /S/ THOMAS P. GIBBONS

Thomas P. Gibbons Vice Chairman and Chief Financial Officer

Date: October 24, 2015

BNY MELLON INTERNATIONAL ASSET MANAGEMENT (HOLDINGS) No. 1 LIMITED

By: /S/ GREG BRISK

Greg Brisk Director

Date: October 21, 2015

By: /S/ KELLY SCHWARTZ \_\_\_\_\_

Kelly Schwartz

President and Director

Date: May 3, 2016

By: /S/ CLIFFORD CORSO \_\_\_\_\_

Clifford Corso

Chief Executive Officer

Date: March 16, 2015

BNY MELLON PARTICIPACOES LTDA

\_\_\_\_\_

Carlos Alberto Saraiva Director

Date: May 5, 2016

BNY MELLON PARTICIPACOES LTDA

By: /S/ CARLOS ALBERTO SARAIVA By: /S/ MARCUS VINICIUS MATHIAS PEREIRA \_\_\_\_\_

Marcus Vinicius Mathias Pereira

Director Date: May 5, 2016

BNY MELLON INVESTMENT MANAGEMENT

APAC LP

By: BNY MELLON INVESTMENT MANAGEMENT HOLDINGS, LLC, GENERAL PARTNER

By: /S/ PAUL A. GRIFFITHS \_\_\_\_\_

Paul A. Griffiths

President

Date: April 29, 2016

\_\_\_\_\_\_

Fund Administrators

BNY MELLON SERVICE KAPITALANLAGE-

GESELLSCHAFT mbH

By: /S/ KATARINA MELVAN

\_\_\_\_\_

Katarina Melvan

Date: August 19, 2016

BNY MELLON SERVICE KAPITALANLAGE-

GESELLSCHAFT mbH

By: /S/ CAROLINE SPECHT

\_\_\_\_\_

Caroline Specht Managing Director Managing Director(Chairman) Managing Director
e: August 19, 2016 Date: August 19, 2016