Form 5500

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Annual Return/Report of Employee Benefit Plan

This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500.**

OMB Nos. 1210-0110
1210-0089

2016

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A This return/report is for:
- [ ] a multiemployer plan
- [ ] a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)
- [X] a single-employer plan
- [ ] a DFE (specify) ____

B This return/report is:
- [ ] the first return/report
- [ ] the final return/report
- [ ] an amended return/report
- [ ] a short plan year return/report (less than 12 months)

C If the plan is a collectively-bargained plan, check here. . . . . ▶ [ ]

D Check box if filing under:
- [X] Form 5558
- [ ] automatic extension
- [ ] the DFVC program
- [ ] special extension (enter description)

Part II Basic Plan Information—enter all requested information

1a Name of plan
ABB INC. CASH BALANCE PENSION PLAN

1b Three-digit plan number (PN) ▶ 301

1c Effective date of plan 01/01/1992

2a Plan sponsor's name (employer, if for a single-employer plan)
Mailing address (include room, apt., suite no. and street, or P.O. Box)
City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)

ABB INC.

305 GREGSON DRIVE
CARY, NC 27511

2b Employer Identification Number (EIN) 36-3100018

2c Plan Sponsor's telephone number 919-856-2360

2d Business code (see instructions) 335900

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/12/2017	DANIEL HAGMANN
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE	Filed with authorized/valid electronic signature.	10/11/2017	JAN ALLDE
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE

Preparer's name (including firm name, if applicable) and address (include room or suite number)

Preparer's telephone number

3a	Plan administrator's name and address [X] Same as Plan Sponsor	**3b**	Administrator's EIN
		3c	Administrator's telephone number
4	If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report:	**4b**	EIN
a	Sponsor's name	**4c**	PN

5	Total number of participants at the beginning of the plan year	**5**	14167
6	Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines **6a(1), 6a(2), 6b, 6c,** and **6d**).		
a(1)	Total number of active participants at the beginning of the plan year	**6a(1)**	4641
a(2)	Total number of active participants at the end of the plan year	**6a(2)**	4181
b	Retired or separated participants receiving benefits	**6b**	3718
c	Other retired or separated participants entitled to future benefits	**6c**	4587
d	Subtotal. Add lines **6a(2)**, **6b**, and **6c**.	**6d**	12486
e	Deceased participants whose beneficiaries are receiving or are entitled to receive benefits.	**6e**	1014
f	Total. Add lines **6d** and **6e**.	**6f**	13500
g	Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)	**6g**	0
h	Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	**6h**	0
7	Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item)	**7**	

8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:
1C 3H

b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:

9a Plan funding arrangement (check all that apply)

(1)	[ ]	Insurance
(2)	[ ]	Code section 412(e)(3) insurance contracts
(3)	[X]	Trust
(4)	[ ]	General assets of the sponsor

9b Plan benefit arrangement (check all that apply)

(1)	[ ]	Insurance
(2)	[ ]	Code section 412(e)(3) insurance contracts
(3)	[X]	Trust
(4)	[ ]	General assets of the sponsor

10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

a Pension Schedules

(1)	[X]	**R** (Retirement Plan Information)
(2)	[ ]	**MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
(3)	[X]	**SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

b General Schedules

(1)	[X]		**H** (Financial Information)
(2)	[ ]		**I** (Financial Information – Small Plan)
(3)	[ ]	0	**A** (Insurance Information)
(4)	[X]		**C** (Service Provider Information)
(5)	[X]		**D** (DFE/Participating Plan Information)
(6)	[X]		**G** (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2016 Form M-1 annual report. If the plan was not required to file the 2016 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code_____

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500 or 5500-SF.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan
ABB INC. CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 301

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
ABB INC.

D Employer Identification Number (EIN)
36-3100018

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [ ] 100 or fewer [ ] 101-500 [X] More than 500

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2016

2 Assets:

a Market value	**2a**	757951868
b Actuarial value	**2b**	801829801

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	4682	183816134	183816134
b For terminated vested participants	4844	177980670	177980670
c For active participants	4641	332150552	332150552
d Total	14167	693947356	693947356

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.92 %
6 Target normal cost	**6**	3300000

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE

Signature of actuary

09/25/2017
Date

JOHN D STEELE
Type or print name of actuary

17-05326
Most recent enrollment number

TOWERS WATSON DELAWARE INC.
Firm name

203-326-5400
Telephone number (including area code)

ONE STAMFORD PLAZA
263 TRESSER BOULEVARD
STAMFORD, CT 06901-3226
Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	86617011	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	86617011	0
10	Interest on line 9 using prior year's actual return of -0.97%	-840185	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 6.09 %		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	85776826	0

Part III Funding Percentages

14	Funding target attainment percentage	14	103.18%
15	Adjusted funding target attainment percentage	15	115.54%
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	114.98%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
			Totals ► 18(b)	0	18(c) 0

19	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
	a Contributions allocated toward unpaid minimum required contributions from prior years.	19a	0
	b Contributions made to avoid restrictions adjusted to valuation date	19b	0
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	0

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? ☐ Yes ☒ No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ☐ Yes ☐ No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	
4.43%	5.91%	6.65%	☐ N/A, full yield curve used

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	63

23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment	☐ Yes	☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment	☒ Yes	☐ No

27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):

a Target normal cost (line 6)	**31a**	3300000
b Excess assets, if applicable, but not greater than line 31a	**31b**	3300000

32 Amortization installments:

	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	0

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	0
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

42 Amount of acceleration adjustment	**42**	0
43 Excess installment acceleration amount to be carried over to future plan years	**43**	0

SCHEDULE C (Form 5500)	Service Provider Information	OMB No. 1210-0110
Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ▶ **File as an attachment to Form 5500.**	**2016** **This Form is Open to Public Inspection.**

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ABB INC. CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 301

C Plan sponsor's name as shown on line 2a of Form 5500
ABB INC.

D Employer Identification Number (EIN)
36-3100018

Part I Service Provider Information (see instructions)

You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

a Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).. . . . . [X] Yes [ ] No

b If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

TRILANTIC CAPTIAL MANAGEMENT LLC

26-4600829

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

HARBOURVEST PARTNERS LP

74-3130888

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

WELLINGTON TRUST COMPANY, NA

04-2755549

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

OAKTREE CAPITAL MANAGEMENT, L.P.

26-0189082

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

AON HEWITT

36-2235791

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
13 64 50	NONE	557001	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

BNY MELLON

13-5160382

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
21 50	NONE	329178	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

WILLIS TOWERS WATSON

53-0181291

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
11 17 50	NONE	295004	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

PIMCO

33-0629048

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51 52	NONE	257333	Yes [X] No [ ]	Yes [X] No [ ]	0	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

AON RISK SERVICES

36-3871028

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
23 50	NONE	200415	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

ABB BUSINESS SERVICES

36-3100018

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 50	PLAN SPONSOR	196512	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

DODGE & COX

94-1441976

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51 52	NONE	190145	Yes [X] No [ ]	Yes [X] No [ ]	0	Yes [ ] No [X]

(a) Enter name and EIN or address (see instructions)

MARATHON ASSET MANAGEMENT LLC

95-4328983

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	154286	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

NEUBERGER BERMAN

61-1591182

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	69781	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

PARETO INVESTMENT MANAGEMENT LTD.

98-0437330

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	65141	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

GRANT THORNTON

36-6055558

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
10 50	NONE	58481	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

PARAMETRIC PORTFOLIO ASSOCIATES LLC

20-0292745

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	38924	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

HILLSWICK ASSET MANAGEMENT

90-0172984

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	21506	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

OFI GLOBAL TRUST COMPANY

13-3459790

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	19291	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

PORTFOLIO TECH

36-4123495

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 50	NONE	16433	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

DRINKER BIDDLE & REATH LLP

23-1423089

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
29 50	NONE	10485	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

PIER CAPITAL LLC

86-1105603

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 28 51	NONE	8893	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

(a) Enter name and EIN or address (see instructions)

BLOOMBERG

13-3417984

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
49 50	NONE	7586	Yes [ ] No [X]	Yes [ ] No [ ]		Yes [ ] No [ ]

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, $5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

FIDELITY MANAGEMENT

04-2647786

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
13 50 64	NONE	6536	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received $1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
GRANTHAM, MAYO, VAN OTTERLOO & CO.	27 52	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
GMO EMERGING DOMESTIC OPP FUND - II 27-2982895	MANAGEMENT FEE (.75%); SHAREHOLDER SERVICE FEE, 12B-1 FEES, ADMIN FEES (.22%); TRANSFER AGENT FEES (.21%)

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation
GRANTHAM, MAYO, VAN OTTERLOO & CO.	27 52	0

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.
GMO EMERGING DOMESTIC OPP FUND-III 27-2982895	MANAGEMENT FEE (.75%); SHAREHOLDER SERVICE FEE, 12B-1 FEES, ADMIN FEES (.22%); TRANSFER AGENT FEES (.21%)

(a) Enter service provider name as it appears on line 2	**(b)** Service Codes (see instructions)	**(c)** Enter amount of indirect compensation

(d) Enter name and EIN (address) of source of indirect compensation	**(e)** Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

(a) Enter name and EIN or address of service provider (see instructions)	**(b)** Nature of Service Code(s)	**(c)** Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)

(complete as many entries as needed)

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

a Name:	**b** EIN:
c Position:	
d Address:	**e** Telephone:

Explanation:

SCHEDULE D (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

DFE/Participating Plan Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection.

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ABB INC. CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 301

C Plan or DFE sponsor's name as shown on line 2a of Form 5500
ABB INC.

D Employer Identification Number (EIN)
36-3100018

Part I **Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)**
(Complete as many entries as needed to report all interests in DFEs)

a Name of MTIA, CCT, PSA, or 103-12 IE: ABB INC. MASTER TRUST

b Name of sponsor of entity listed in (a): ABB INC.

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
36-3100018-050	M	746411597

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	**d** Entity code	**e** Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

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a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

a Plan name

b Name of plan sponsor	**c** EIN-PN

SCHEDULE G (Form 5500)	Financial Transaction Schedules	OMB No. 1210-0110
Department of Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration	This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ **File as an attachment to Form 5500.**	**2016** **This Form is Open to Public Inspection.**

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan	**B** Three-digit plan number (PN) ▶
ABB INC. CASH BALANCE PENSION PLAN	301

C Plan sponsor's name as shown on line 2a of Form 5500	**D** Employer Identification Number (EIN)
ABB INC.	36-3100018

Part I Schedule of Loans or Fixed Income Obligations in Default or Classified as Uncollectible

Complete as many entries as needed to report all loans or fixed income obligations in default or classified as uncollectible. Check box (a) if obligor is known to be a party in interest. Attach Overdue Loan Explanation for each loan listed. See Instructions.

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items
☐		

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items
☐		

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items
☐		

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

(a)	(b) Identity and address of obligor	(c) Detailed description of loan including dates of making and maturity, interest rate, the type and value of collateral, any renegotiation of the loan and the terms of the renegotiation, and other material items

	Amount received during reporting year			Amount overdue	
(d) Original amount of loan	(e) Principal	(f) Interest	(g) Unpaid balance at end of year	(h) Principal	(i) Interest

Part II Schedule of Leases in Default or Classified as Uncollectible

Complete as many entries as needed to report all leases in default or classified as uncollectible. Check box (a) if lessor or lessee is known to be a party in interest. Attach Overdue Lease Explanation for each lease listed. (See instructions)

(a)	(b) Identity of lessor/lessee	(c) Relationship to plan, employer, employee organization, or other party-in-interest	(d) Terms and description (type of property, location and date it was purchased, terms regarding rent, taxes, insurance, repairs, expenses, renewal options, date property was leased)
☐			

(e) Original cost	(f) Current value at time of lease	(g) Gross rental receipts during the plan year	(h) Expenses paid during the plan year	(i) Net receipts	(j) Amount in arrears

(a)	(b) Identity of lessor/lessee	(c) Relationship to plan, employer, employee organization, or other party-in-interest	(d) Terms and description (type of property, location and date it was purchased, terms regarding rent, taxes, insurance, repairs, expenses, renewal options, date property was leased)
☐			

(e) Original cost	(f) Current value at time of lease	(g) Gross rental receipts during the plan year	(h) Expenses paid during the plan year	(i) Net receipts	(j) Amount in arrears

(a)	(b) Identity of lessor/lessee	(c) Relationship to plan, employer, employee organization, or other party-in-interest	(d) Terms and description (type of property, location and date it was purchased, terms regarding rent, taxes, insurance, repairs, expenses, renewal options, date property was leased)
☐			

(e) Original cost	(f) Current value at time of lease	(g) Gross rental receipts during the plan year	(h) Expenses paid during the plan year	(i) Net receipts	(j) Amount in arrears

(a)	(b) Identity of lessor/lessee	(c) Relationship to plan, employer, employee organization, or other party-in-interest	(d) Terms and description (type of property, location and date it was purchased, terms regarding rent, taxes, insurance, repairs, expenses, renewal options, date property was leased)
☐			

(e) Original cost	(f) Current value at time of lease	(g) Gross rental receipts during the plan year	(h) Expenses paid during the plan year	(i) Net receipts	(j) Amount in arrears

(a)	(b) Identity of lessor/lessee	(c) Relationship to plan, employer, employee organization, or other party-in-interest	(d) Terms and description (type of property, location and date it was purchased, terms regarding rent, taxes, insurance, repairs, expenses, renewal options, date property was leased)
☐			

(e) Original cost	(f) Current value at time of lease	(g) Gross rental receipts during the plan year	(h) Expenses paid during the plan year	(i) Net receipts	(j) Amount in arrears

(a)	(b) Identity of lessor/lessee	(c) Relationship to plan, employer, employee organization, or other party-in-interest	(d) Terms and description (type of property, location and date it was purchased, terms regarding rent, taxes, insurance, repairs, expenses, renewal options, date property was leased)
☐			

(e) Original cost	(f) Current value at time of lease	(g) Gross rental receipts during the plan year	(h) Expenses paid during the plan year	(i) Net receipts	(j) Amount in arrears

Part III Nonexempt Transactions

Complete as many entries as needed to report all nonexempt transactions. **Caution:** If a nonexempt prohibited transaction occurred with respect to a disqualified person, file Form 5330 with the IRS to pay the excise tax on the transaction.

(a) Identity of party involved	(b) Relationship to plan, employer, or other party-in-interest	(c) Description of transaction including maturity date, rate of interest, collateral, par or maturity value	(d) Purchase price
ABB INC.	PLAN SPONSOR	INADVERTENT USE OF PLAN ASSETS FOR SETTLOR EXPENSES	

(e) Selling price	(f) Lease rental	(g) Transaction expenses	(h) Cost of asset	(i) Current value of asset	(j) Net gain (or loss) on each transaction
				97620	

(a) Identity of party involved	(b) Relationship to plan, employer, or other party-in-interest	(c) Description of transaction including maturity date, rate of interest, collateral, par or maturity value	(d) Purchase price

(e) Selling price	(f) Lease rental	(g) Transaction expenses	(h) Cost of asset	(i) Current value of asset	(j) Net gain (or loss) on each transaction

(a) Identity of party involved	(b) Relationship to plan, employer, or other party-in-interest	(c) Description of transaction including maturity date, rate of interest, collateral, par or maturity value	(d) Purchase price

(e) Selling price	(f) Lease rental	(g) Transaction expenses	(h) Cost of asset	(i) Current value of asset	(j) Net gain (or loss) on each transaction

(a) Identity of party involved	(b) Relationship to plan, employer, or other party-in-interest	(c) Description of transaction including maturity date, rate of interest, collateral, par or maturity value	(d) Purchase price

(e) Selling price	(f) Lease rental	(g) Transaction expenses	(h) Cost of asset	(i) Current value of asset	(j) Net gain (or loss) on each transaction

(a) Identity of party involved	(b) Relationship to plan, employer, or other party-in-interest	(c) Description of transaction including maturity date, rate of interest, collateral, par or maturity value	(d) Purchase price

(e) Selling price	(f) Lease rental	(g) Transaction expenses	(h) Cost of asset	(i) Current value of asset	(j) Net gain (or loss) on each transaction

(a) Identity of party involved	(b) Relationship to plan, employer, or other party-in-interest	(c) Description of transaction including maturity date, rate of interest, collateral, par or maturity value	(d) Purchase price

(e) Selling price	(f) Lease rental	(g) Transaction expenses	(h) Cost of asset	(i) Current value of asset	(j) Net gain (or loss) on each transaction

SCHEDULE H (Form 5500)

Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Financial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ABB INC. CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 301

C Plan sponsor's name as shown on line 2a of Form 5500
ABB INC.

D Employer Identification Number (EIN)
36-3100018

Part I Asset and Liability Statement

1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions	1b(1)		
(2) Participant contributions	1b(2)		
(3) Other	1b(3)		
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit)	1c(1)		
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property)	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans	1c(8)		
(9) Value of interest in common/collective trusts	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)	756968573	746411597
(12) Value of interest in 103-12 investment entities	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds)	1c(13)		
(14) Value of funds held in insurance company general account (unallocated contracts)	1c(14)		
(15) Other	1c(15)		

			(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:			
	(1) Employer securities	1d(1)		
	(2) Employer real property	1d(2)		
e	Buildings and other property used in plan operation	1e		
f	Total assets (add all amounts in lines 1a through 1e)	1f	756968573	746411597
	Liabilities			
g	Benefit claims payable	1g	0	0
h	Operating payables	1h	912536	500265
i	Acquisition indebtedness	1i		
j	Other liabilities	1j		
k	Total liabilities (add all amounts in lines 1g through1j)	1k	912536	500265
	Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	756056037	745911332

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

	Income		(a) Amount	(b) Total
a	**Contributions:**			
	(1) Received or receivable in cash from: **(A)** Employers	2a(1)(A)		
	(B) Participants	2a(1)(B)		
	(C) Others (including rollovers)	2a(1)(C)		
	(2) Noncash contributions	2a(2)		
	(3) Total contributions. Add lines **2a(1)(A), (B), (C),** and line **2a(2)**	2a(3)		0
b	**Earnings on investments:**			
	(1) Interest:			
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)		
	(B) U.S. Government securities	2b(1)(B)		
	(C) Corporate debt instruments	2b(1)(C)		
	(D) Loans (other than to participants)	2b(1)(D)		
	(E) Participant loans	2b(1)(E)		
	(F) Other	2b(1)(F)		
	(G) Total interest. Add lines **2b(1)(A)** through **(F)**	2b(1)(G)		0
	(2) Dividends: **(A)** Preferred stock	2b(2)(A)		
	(B) Common stock	2b(2)(B)		
	(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)		
	(D) Total dividends. Add lines **2b(2)(A)**, **(B)**, and **(C)**	2b(2)(D)		0
	(3) Rents	2b(3)		
	(4) Net gain (loss) on sale of assets: **(A)** Aggregate proceeds	2b(4)(A)		
	(B) Aggregate carrying amount (see instructions)	2b(4)(B)		
	(C) Subtract line **2b(4)(B)** from line **2b(4)(A)** and enter result	2b(4)(C)		0
	(5) Unrealized appreciation (depreciation) of assets: **(A)** Real estate	2b(5)(A)		
	(B) Other	2b(5)(B)		
	(C) Total unrealized appreciation of assets. Add lines **2b(5)(A)** and **(B)**	2b(5)(C)		0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		55133940
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds)	2b(10)		
c Other income	2c		
d Total income. Add all **income** amounts in column (b) and enter total	2d		55133940
Expenses			
e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	60252361	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)		
(4) Total benefit payments. Add lines **2e(1)** through **(3)**	2e(4)		60252361
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense	2h		
i Administrative expenses: (1) Professional fees	2i(1)	367569	
(2) Contract administrator fees	2i(2)	563537	
(3) Investment advisory and management fees	2i(3)	825301	
(4) Other	2i(4)	3269877	
(5) Total administrative expenses. Add lines **2i(1)** through **(4)**	2i(5)		5026284
j Total expenses. Add all **expense** amounts in column (b) and enter total	2j		65278645
Net Income and Reconciliation			
k Net income (loss). Subtract line **2j** from line **2d**	2k		-10144705
l Transfers of assets:			
(1) To this plan	2l(1)		
(2) From this plan	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☐ Unqualified **(2)** ☐ Qualified **(3)** ☒ Disclaimer **(4)** ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? ☒ Yes ☐ No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: GRANT THORNTON LLP **(2)** EIN: 36-6055558

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. **(2)** ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

		Yes	No	Amount
a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.)	4a		X	
b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)	4b		X	

			Yes	No	Amount
c	Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d	X		97620
e	Was this plan covered by a fidelity bond?	4e	X		40000000
f	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g	Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g		X	
h	Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i	Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i		X	
j	Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j		X	
k	Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l	Has the plan failed to provide any benefit when due under the plan?	4l		X	
m	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m			
n	If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3	4n			
o	Defined Benefit Plan or Money Purchase Pension Plan Only: Were any distributions made during the plan year to an employee who attained age 62 and had not separated from service?	4o			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? If "Yes," enter the amount of any plan assets that reverted to the employer this year ☐ **Yes** ☒ **No** **Amount:**

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	**5b(2)** EIN(s)	**5b(3)** PN(s)

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ..... ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 3981322. (See instructions.)

Part V Trust Information

6a Name of trust	**6b** Trust's EIN

6c Name of trustee or custodian	**6d** Trustee's or custodian's telephone number

SCHEDULE R (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Retirement Plan Information

This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection.

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan
ABB INC. CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 301

C Plan sponsor's name as shown on line 2a of Form 5500
ABB INC.

D Employer Identification Number (EIN)
36-3100018

Part I Distributions

All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions **1** 0

2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):

EIN(s): 04-3192613

Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.

3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year **3** 371

Part II Funding Information (If the plan is not subject to the minimum funding requirements of section of 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)

4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? ..... ☐ **Yes** ☒ **No** ☐ **N/A**

If the plan is a defined benefit plan, go to line 8.

5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. **Date:** Month _____ Day _____ Year _____

If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.

6 **a** Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived) **6a**

b Enter the amount contributed by the employer to the plan for this plan year **6b**

c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount) **6c**

If you completed line 6c, skip lines 8 and 9.

7 Will the minimum funding amount reported on line 6c be met by the funding deadline? ..... ☐ **Yes** ☐ **No** ☐ **N/A**

8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? ..... ☐ **Yes** ☐ **No** ☒ **N/A**

Part III Amendments

9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. ..... ☐ **Increase** ☐ **Decrease** ☐ **Both** ☒ **No**

Part IV ESOPs (see instructions). If this is not a plan described under Section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.

10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? ..... ☐ **Yes** ☐ **No**

11 **a** Does the ESOP hold any preferred stock? ..... ☐ **Yes** ☐ **No**

b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) ..... ☐ **Yes** ☐ **No**

12 Does the ESOP hold any stock that is not readily tradable on an established securities market? ..... ☐ **Yes** ☐ **No**

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify):

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

---

a Name of contributing employer

b EIN **c** Dollar amount contributed by employer

d Date collective bargaining agreement expires *(If employer contributes under more than one collective bargaining agreement, check box* ☐ *and see instructions regarding required attachment. Otherwise, enter the applicable date.)* Month _____ Day _____ Year _____

e Contribution rate information *(If more than one rate applies, check this box* ☐ *and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)*
(1) Contribution rate (in dollars and cents) _____
(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14 Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

a The current year	**14a**	
b The plan year immediately preceding the current plan year	**14b**	
c The second preceding plan year	**14c**	

15 Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

a The corresponding number for the plan year immediately preceding the current plan year	**15a**	
b The corresponding number for the second preceding plan year	**15b**	

16 Information with respect to any employers who withdrew from the plan during the preceding plan year:

a Enter the number of employers who withdrew during the preceding plan year	**16a**	
b If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	**16b**	

17 If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐

Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans

18 If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment ☐

19 If the total number of participants is 1,000 or more, complete lines (a) through (c)

a Enter the percentage of plan assets held as:
Stock: 10.0 % Investment-Grade Debt: 35.0 % High-Yield Debt: 18.0 % Real Estate: 0.0 % Other: 37.0 %

b Provide the average duration of the combined investment-grade and high-yield debt:
☐ 0-3 years ☒ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more

c What duration measure was used to calculate line 19(b)?
☐ Effective duration ☐ Macaulay duration ☒ Modified duration ☐ Other (specify):

Part VII IRS Compliance Questions

20a Is the plan a 401(k) plan? If "No," skip b	☐ Yes ☐ No
20b How did the plan satisfy the nondiscrimination requirements for employee deferrals under section 401(k)(3) for the plan year? Check all that apply:	☐ Design-based safe harbor ☐ "Prior year" ADP test ☐ "Current year" ADP test ☐ N/A
21a What testing method was used to satisfy the coverage requirements under section 410(b) for the plan year? Check all that apply:	☐ Ratio percentage test ☐ Average benefit test ☐ N/A
21b Did the plan satisfy the coverage and nondiscrimination requirements of sections 410(b) and 401(a)(4) for the plan year by combining this plan with any other plan under the permissive aggregation rules?	☐ Yes ☐ No

22a If the plan is a master and prototype plan (M&P) or volume submitter plan that received a favorable IRS opinion letter or advisory letter, enter the date of the letter ____/____/____ and the serial number _____.

22b If the plan is an individually-designed plan that received a favorable determination letter from the IRS, enter the date of the most recent determination letter ____/____/____.

Financial Statements and Report of
Independent Certified Public Accountants

ABB Inc. Cash Balance Pension Plan

December 31, 2016 and 2015

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REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

To the Plan Administrator of
ABB Inc. Cash Balance Pension Plan:

Report on the financial statements

We were engaged to audit the accompanying financial statements of **ABB Inc. Cash Balance Pension Plan** (the "Plan"), which comprise the statements of net assets available for benefits and statements of accumulated plan benefits as of December 31, 2016 and 2015, and the related statements of changes in net assets available for benefits and statements of changes in accumulated plan benefits for the years ended December 31, 2016 and 2015, and the related notes to the financial statements.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on the financial statements based on conducting the audit in accordance with auditing standards generally accepted in the United States of America. Because of the matter described in the Basis for Disclaimer of Opinion paragraph; however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion.

Basis for disclaimer of opinion

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the Plan administrator instructed us not to perform, and we did not perform, any auditing procedures with respect to the certified information described in Note 5, except for comparing such information with the related information included in the financial statements. We have been informed by the Plan administrator that the certifying entity meets the requirements of 29 CFR 2520.103-8. The Plan administrator obtained certifications from this entity as of and for the years ended December 31, 2016 and 2015, stating that the certified information provided to the Plan administrator is complete and accurate.

Disclaimer of opinion

Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.

Supplementary information

The supplemental Schedule G, Part III– Schedule of nonexempt transactions for the year ended December 31, 2016 is presented for purposes of additional analysis and is not a required part of the financial statements, but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. Because of the significance of the matter described in the Basis for Disclaimer of Opinion paragraph, we do not express an opinion on the supplemental schedule.

Report on form and content in compliance with DOL rules and regulations

The form and content of the information included in the financial statements and supplemental schedules, other than that derived from the certified information described in Note 5, have been audited by us in accordance with auditing standards generally accepted in the United States of America and, in our opinion, are presented in compliance with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974.

Grant Thornton LLP

Raleigh, North Carolina
October 6, 2017

Statements of net assets available for benefits

December 31	2016	2015
	$	$
Assets		
Interest in the ABB Inc. Master Trust, at fair value	746,411,597	756,968,573
Total assets	746,411,597	756,968,573
Liabilities		
Accrued expenses	500,265	912,536
Total liabilities	500,265	912,536
Net assets available for benefits	745,911,332	756,056,037

The accompanying notes are an integral part of these financial statements.

Statements of changes in net assets available for benefits

For the years ended December 31	2016	2015
	$	$
Additions to (deductions from) net assets attributed to:		
Plan interest in net investment gain (loss) of the ABB Inc. Master Trust	55,133,940	(6,596,551)
Benefits paid	(60,252,361)	(59,656,168)
Administrative and other expenses	(5,026,284)	(5,914,916)
Net decrease	(10,144,705)	(72,167,635)
Net assets available for benefits:		
Beginning of year	756,056,037	828,223,672
End of year	745,911,332	756,056,037

The accompanying notes are an integral part of these financial statements.

Statements of accumulated plan benefits

December 31	2016	2015
	$	$
Actuarial present value of accumulated plan benefits:		
Vested benefits:		
Participants currently receiving payments	211,366,185	195,632,403
Other participants	599,365,381	652,688,135
Total vested benefits	810,731,566	848,320,538
Total actuarial present value of accumulated plan benefits	810,731,566	848,320,538

The accompanying notes are an integral part of these financial statements.

Statements of changes in accumulated plan benefits

For the years ended December 31	2016	2015
	$	$
Actuarial present value of accumulated plan benefits, beginning of year	848,320,538	900,326,534
Increase (decrease) during the year attributable to:		
Benefits accumulated and plan experience	(12,688,983)	15,957,885
Changes in actuarial assumptions	2,596,253	(40,510,499)
Increase for interest due to decrease in discount period	32,756,119	32,202,786
Benefits paid	(60,252,361)	(59,656,168)
Net decrease	(37,588,972)	(52,005,996)
Actuarial present value of accumulated plan benefits, end of year	810,731,566	848,320,538

The accompanying notes are an integral part of these financial statements.

Notes to financial statements

1 Plan Description

The ABB Inc. Cash Balance Pension Plan (the Plan) is a defined benefit pension plan covering substantially all salaried employees of ABB Inc. (the Company or Employer), the Plan sponsor. A description of the Plan, including vesting and benefit payment provisions, is included in the Plan Document. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). The latest amendment is Amendment Three dated December 18, 2015.

The Plan was frozen to new participants and for future service credits as of December 31, 2011. Active participants employed on December 31, 2011 were fully vested in their accrued account balance as of that date. Participants' accrued account balances will continue to grow at the Plan's stated interest rate until the participant terminates employment with the Company. As of December 31, 2011, participants will no longer accrue benefits based on compensation.

2 Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements have been prepared on the accrual basis of accounting.

Recent Accounting Pronouncements

In May 2015, the FASB issued ASU 2015-07, *"Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent),"* which exempts investments measured using the net asset value (NAV) practical expedient in ASC 820, *"Fair Value Measurement,"* from categorization within the fair value hierarchy. The guidance requires retrospective application and is effective for public business entities for fiscal years, and interim periods within those years, beginning after December 15, 2015. For all other entities, the guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2016. Early adoption is permitted and management elected to early adopt the provisions of this new standard. Accordingly, the amendment was retrospectively applied resulting in the removal of the investments for which fair value is measured using the NAV per share practical expedient from the fair value hierarchy. The amount of investments measured at NAV (or its equivalent) is disclosed so that total investments in the fair value hierarchy can be reconciled to total investments measured at fair value.

In July 2015, the FASB issued ASU 2015-12, "*Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), and Health and Welfare Benefit Plans (Topic 965): Part (I) Fully Benefit-Responsive Investment Contracts, Part (II) Plan Investment Disclosures, Part (III) Measurement Date Practical Expedient."* This three-part standard simplifies employee benefit plan reporting with respect to fully benefit-responsive investment contracts and plan investment disclosures, and provides for a measurement-date practical expedient. Part I and Part II are effective for fiscal years beginning after December 15, 2015, and should be applied retrospectively, with early application permitted. Part III is effective for fiscal years beginning after December 15, 2015, and should be applied prospectively, with early application permitted.

Management adopted Part II in these financial statements and determined Parts I and III are not applicable to the Plan. Accordingly, the amendments were retrospectively applied, resulting in the elimination of disclosures of individual investments that represent 5% or more of net assets available for benefits, and the net appreciation or depreciation in fair value of investments by investment type, and the level of disaggregation of investments that are measured at fair value has been simplified by disaggregating investments by general type versus disaggregating by nature, characteristics and risks.

Payment of Benefits

Benefit payments are recorded when paid to participants. A participant who attains age 70½ will commence his or her benefit no later than the April 1 of the calendar year, following calendar year in which he retires or he turns 70½, whichever is later.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Funding Policy

The Company shall make contributions to the Plan as shall be necessary under accepted actuarial principles to meet the requirements of ERISA. Employer contributions are based on an actuarial determination which provides for funding (a) the annual normal cost for the current year and (b) an amount necessary to amortize the unfunded accrued liability.

It is the Company's intention to only make contributions that are tax deductible. For each of the years ended December 31, 2016 and 2015, the Plan has satisfied the minimum funding requirements of ERISA.

Valuation of Investments and Income Recognition

The assets of the Plan are held in the ABB Inc. Master Trust (Master Trust), along with the assets of certain other plans of the Company. BNY Mellon (the Trustee) is the trustee of the Master Trust.

Income, including realized and unrealized gains and losses, of the Master Trust is allocated monthly among participating plans based on the relationship of the fair value of the assets of each plan to the total fair value of the assets of the Master Trust as of the end of the preceding month. Employer contributions and benefit payments are applied on a specific basis to each plan.

Assets of the Master Trust are stated at fair value which, as used for financial statement purposes, represents market or current value as reported by the Master Trust's Trustee. The fair value of the Plan's interest in the Master Trust is based on the beginning of the year value of the Plan's interest in the Master Trust plus actual contributions and allocated investment income/loss less actual distributions and allocated administrative expenses.

Investment transactions are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Administrative Expenses

The Plan's expenses are paid either by the Plan or the Company, as provided by the Plan document. Expenses that are paid directly by the Company are excluded from these financial statements. Certain expenses incurred in connection with the general administration of the Plan that are paid by the Plan are recorded as deductions in the accompanying statements of changes in net asset available for benefits. In addition, certain investment-related expenses are included in net investment gain of the Master Trust presented in the accompanying statements of changes in net assets available for benefits.

Securities Lending

As of and for the years ended December 31, 2016 and 2015, the Master Trust participated in the Trustee's securities lending program for securities held in custody at the Trustee. These securities are lent to certain unrelated third-party brokers in exchange for collateral, usually in the form of cash. Collateralization levels are equal to a percentage of the market value of the borrowed securities. For U.S. securities, collateral shall not be less than 102% of the fair value of the loaned securities, and for non-U.S. securities, collateral shall not be less than 105% of the fair value of the loaned securities unless it is denominated in the same currency as the collateral, in which case it will be 102% of the fair value. Collateral received is invested in a short-term collateral reinvestment fund consisting of high-quality, short-term investments managed by BNY Mellon. The value of loaned securities in the Master Trust amounted to approximately $12,378,000 and $41,654,000 at December 31, 2016 and 2015, respectively. Income from securities lending is included in miscellaneous income in Note 4. The obligation to return collateral is included net in the balance for each respective investment type with loaned securities with the majority being included in corporate bonds.

Derivatives

The Plan (through the Master Trust) may enter into foreign currency forward exchange contracts primarily to hedge against foreign currency exchange rate risks on its non-U.S dollar denominated investment securities. When entering into a forward currency contract, the Plan agrees to receive or deliver a fixed quantity of foreign currency for an agreed-upon price on an agreed future date. The Plan's net equity therein, representing unrealized gain or loss on the contracts, as measured by the difference between the forward foreign exchanges rates at the dates of entry in the contracts and the forward rates at the reporting date is included in the Master Trust's net assets. Realized and unrealized gains and losses are included in the Master Trust's net investment gain (loss). These instruments involve market risk, credit risk or both kinds of risks in excess of the amount recognized in the statement of net assets. Risks arise from the possible inability of counterparties to meet the terms of their contracts and movement in currency and securities values and interest rates. The values of such derivative contracts are included net in the balance for each respective investment type with derivative contracts with the majority being included in the state and foreign bonds.

At December 31, 2016 and 2015, the Master Trust had the following foreign currency forward exchange contracts:

FAIR VALUE OF OUTSTANDING FORWARD CONTRACTS

As of December 31, 2016

Counterparty Allocation of Unrealized Profit / (Loss)		Maturity Date	Total	AUD	CHF	EUR	GBP	JPY	HKD
			$	$	$	$	$	$	$
Citibank NA	CTL	17-Feb-15	USD 134,438	USD 0	(USD 3,267)	(USD 41,737)	USD 33,290	USD 146,152	USD 0
Goldman Sachs International	GSL	17-Feb-15	USD 423,311	USD 0	USD 100,484	USD 0	USD 0	USD 322,827	USD 0
HSBC Bank plc	MDL	17-Feb-15	USD 1,526,163	USD 0	USD 5,227	USD 0	(USD 5,777)	USD 1,526,713	USD 0
JP Morgan Chase	CML	17-Feb-15	USD 302,912	USD 0	USD 0	USD 130,269	(USD 14,009)	USD 186,652	USD 0
Royal Bank of Canada	RBL	17-Feb-15	(USD 1,934)	USD 0	USD 0	USD 0	USD 0	(USD 2,010)	USD 76
Westpac Banking Corporation	WPL	17-Feb-15	USD 756,011	USD 0	USD 0	USD 756,011	USD 0	USD 0	USD 0
Total unrealized profit / (loss) as of December 31, 2016			USD 3,140,901	USD 0	USD 102,444	USD 844,543	USD 13,504	USD 2,180,334	USD 76

FAIR VALUE OF OUTSTANDING FORWARD CONTRACTS

As of December 31, 2015

Counterparty Allocation of Unrealized Profit / (Loss)		Maturity Date	Total	AUD	CHF	EUR	GBP	JPY	HKD
			$	$	$	$	$	$	$
Citibank NA	CTL	18-Feb-16	(USD 318,956)	(USD 10,420)	(USD 46,053)	(USD 202,907)	(USD 61,827)	USD 2,251	0
Goldman Sachs International	GSL	18-Feb-16	(USD 168,960)	(USD 168,960)	USD 0	USD 0	USD 0	USD 0	0
HSBC Bank plc	MDL	18-Feb-16	(USD 265,595)	USD 0	USD 0	USD 9,440	USD 24,035	(USD 299,080)	0
JP Morgan Chase	CML	18-Feb-16	(USD 60,558)	USD 0	USD 0	(USD 60,558)	USD 0	USD 0	0
Royal Bank of Canada	RBL	18-Feb-16	(USD 157,404)	USD 0	USD 0	(USD 166,674)	USD 0	USD 9,270	0
Westpac Banking Corporation	WPL	18-Feb-16	USD 492,246	USD 0	USD 0	USD 0	USD 515,995	(USD 23,749)	0
Total unrealized profit / (loss) as of December 31, 2015			(USD 479,227)	(USD 179,380)	(USD 46,053)	(USD 420,699)	USD 478,213	(USD 311,308)	USD 0

The fair value of the foreign currency forward exchange contracts, none of which are accounted for as hedge instruments under FASB ASC 815, *"Derivatives and Hedging,"* are included as a component of the net appreciation (depreciation) in fair value of investments in Note 4.

The Master Trust may be required to post collateral on derivatives if the Master Trust is in a net liability position with the counterparty exceeding certain amounts. Additionally, counterparties may immediately terminate derivatives contracts if the Master Trust fails to maintain sufficient asset coverage for its contracts or its net assets decline by stated percentages.

Master Netting Agreements

The Master Trust is subject to master netting agreements, or netting arrangements, with certain counterparties. These agreements govern the terms of certain transactions and reduce the counterparty risk associated with relevant transactions by specifying offsetting mechanisms and collateral posting arrangements at pre-arranged exposure levels. Since different types of transactions have different mechanics and are sometimes traded out of different legal entities of a particular counterparty organization, each type of transaction may be covered by a different master netting arrangement, possibly resulting in the need for multiple agreements with a single counterparty. Master netting agreements are specific to each different asset type; therefore, they allow the Company to close out and net its total exposure to a specified counterparty in the event of a default with respect to any and all the transactions governed under a single agreement with the counterparty.

The following is a summary by counterparty of the Master Trust's net exposure to derivative assets and liabilities, by financial instrument type, available for offset and net of collateral under a netting agreement at December 31, 2016 and 2015.

As of December 31, 2016:

Counterparty	Fair Value of Derivative Assets	Fair Value of Derivative Liabilities	Net Exposure
	$	$	$
Citibank NA	179,442	(45,004)	134,438
Goldman Sachs International	423,311	-	423,311
HSBC Bank plc	1,531,940	(5,777)	1,526,163
JP Morgan Chase	316,921	(14,009)	302,912
Royal Bank of Canada	76	(2,010)	(1,934)
Westpac Banking Corporation	756,011	-	756,011
Total	3,207,701	(66,800)	3,140,901

As of December 31, 2015:

Counterparty	Fair Value of Derivative Assets	Fair Value of Derivative Liabilities	Net Exposure
	$	$	$
Citibank NA	2,251	(321,207)	(318,956)
Goldman Sachs International	-	(168,960)	(168,960)
HSBC Bank plc	56,496	(322,091)	(265,595)
JP Morgan Chase	-	(60,558)	(60,558)
Royal Bank of Canada	9,270	(166,674)	(157,404)
Westpac Banking Corporation	533,938	(41,692)	492,246
Total	601,955	(1,081,182)	(479,227)

Investment Risk

The Master Trust provides for investments that are exposed to risks such as interest rate, credit and overall market volatility risk. Due to the level of risk associated with certain investment securities, it is possible that changes in the value of investment securities may occur in the near term and those changes could materially affect the amounts reported in the statements of net assets available for benefits.

Risks and Uncertainties

Plan contributions are made, and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Subsequent Events

Management evaluated subsequent events for the Plan through October 6, 2017, the date the financial statements were available to be issued, and has determined that there are no material subsequent events.

3 Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits are those future periodic payments, including lump-sum distributions that are attributable under the Plan's provisions to the service employees have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or other beneficiaries, (b) beneficiaries of employees who have died and (c) present employees or their beneficiaries.

Benefits payable under all circumstances (retirement, death, disability and termination of employment), are included to the extent they are deemed attributable to employee service rendered to the valuation date.

The actuarial present value of accumulated plan benefits as of December 31, 2016 and 2015, was determined by the Plan's actuary, Willis Towers Watson & Company (formerly known as Towers Watson & Company), using employee data supplied by the Company as of January 1, 2016 and 2015, and projected to the respective valuation date, and is that amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements for events such as death, disability, withdrawal or retirement) between the valuation date and the expected date of payment.

The actuarial cost method used to determine the actuarial present value of accumulated plan benefits is the unit credit method.

A summary of the significant actuarial assumptions underlying the actuarial valuation as of December 31, 2016 and 2015 are as follows:

Mortality – 2016: Based on the Retirement Plans – Collar specific RP2016 Mortality Table with Scale MP-2016 generational projection split between annuitants and non-annuitants and sex distinct.

Mortality – 2015: Based on the Retirement Plans – Collar specific RP2015 Mortality Table with Scale MP-2015 generational projection split between annuitants and non-annuitants and sex distinct.

Interest: The assumed interest rates utilized to calculate accumulated plan benefits at December 31, 2016 and 2015 were 3.90% and 4.05%, respectively.

Interest Crediting Rate: The assumed interest crediting rate for December 31, 2016 and 2015 was 4.18% and 4.7%, respectively.

Retirement Age – 2016 and 2015: Age 65 for terminated vested employees and the following chart of rates applies for active employees:

Age	Percentage of Employees Expected to Retire Within One Year
55	4
56	5
57-59	6
60	7
61	10
62	12
63	13
64	16
65-69	30
70 and later	100

The change in interest rates, mortality scale, termination rates and marital assumptions are reflected in the "Changes in actuarial assumptions" in the accompanying statements of changes in accumulated plan benefits. The $40,510,499 change in actuarial assumptions for the year ended December 31, 2015, were due to an increase in the interest rate of 40 basis points to 4.05% and a change in the mortality table.

The foregoing actuarial assumptions are based on the presumption that the Plan will continue. Were the Plan to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated plan benefits.

4 ABB Inc. Master Trust

The Plan's investments are held in the Master Trust, which is a master trust established for the investment of the assets of the Plan and other Company-sponsored retirement plans. Each participating plan has an undivided interest in the Master Trust.

The Master Trust assets are allocated among the participating plans by assigning to each plan those transactions (primarily contributions, benefit payments, and plan-specific expenses) that can be specifically identified and by allocating among all plans, in proportion to each plan's beneficial interest in the Master Trust, income and expenses resulting from the collective investment of the assets of the Master Trust.

At December 31, 2016 and 2015, the Plan had a 54.38% and 54.82% interest in the net assets of the Master Trust, respectively.

The following tables present the net assets for the Master Trust and the net investment income for the Master Trust:

December 31	2016	2015
	$	$
Investments:		
Interest-bearing cash	1,651,500	9,210,146
U.S. government securities	190,323,846	248,845,576
Corporate bonds	492,265,921	337,419,770
Corporate stock - preferred	6,249,189	7,942,434
Corporate stock - common	2,181,145	133,090,136
Partnership / joint venture interests	201,700,678	142,004,003
State and foreign bonds	12,751,045	142,105,237
Collective trusts	330,152,108	313,711,436
103-12 investment entities	1,977,962	21,275,224
Registered investment companies	120,712,575	25,860,370
Short investments	57,408	(645,978)
Net assets	1,360,023,377	1,380,818,354

For the years ended December 31	2016	2015
	$	$
Net appreciation (depreciation) in fair value of investments	69,220,348	(39,046,858)
Interest	19,601,268	18,496,957
Dividends	11,633,303	8,886,918
Miscellaneous income	369,533	11,164
Net investment gain / (loss)	100,824,452	(11,651,819)

5 Investments Certified by Trustee

As permitted by 29 CFR 2520.103-8 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, the Company has obtained a certification from the Trustee as to the completeness and accuracy of the investments and investment activity (except for investments classified as alternative investments and related investment activity, described below) recorded by the Master Trust as of and for the years ended December 31, 2016 and 2015. Additionally, the Company has obtained a certification from the Trustee related to the Plan's interest in the Master Trust and Master Trust investment activity as of and for the years ended December 31, 2016 and 2015. Investment information certified by the Trustee at the Master Trust and Plan levels has not been audited by independent auditors.

At the Master Trust level, the alternative investments and related investment activity as of December 31, 2016 and 2015 and for the years then ended are detailed below:

December 31	2016	2015
	$	$
Private equity investments	37,431,179	48,032,235
Distressed debt	1,888,105	2,313,888
Fund of funds	8,395,032	11,809,672
Total alternative investments	47,714,316	62,155,795

The private equity investments, distressed debt and fund of funds are included as a component of the balance for partnership/joint venture interests and 103-12 investment entities detailed in Note 4.

At the Master Trust level, net realized and unrealized appreciation for these alternative investments is as follows:

For the years ended December 31	2016	2015
	$	$
Net appreciation in fair value of alternative investments	4,111,637	3,312,912

At the Plan level, the Plan's "Interest in the ABB Inc. Master Trust" as reflected in the accompanying statements of net assets available for benefits and the Plan's "Interest in net investment gain (loss) of the ABB Inc. Master Trust" in the accompanying statements of changes in net assets available for benefits has also been certified by the Trustee. While the Plan holds an undivided interest in the Master Trust, the certified amounts for the Plans have been adjusted to reflect the Master Trust alternative investments' fair values and investment gain (loss) of alternative investments noted above. These amounts represent 3.51% and 4.08% of the Plan's "Interest in the ABB Inc. Master Trust" and "Interest in net investment gain of the ABB Inc. Master Trust" at December 31, 2016 and for the year then ended and 4.50% and 28.43% of the Plan's "Interest in the ABB Inc. Master Trust" and "Interest in net investment gain of the ABB Inc. Master Trust" at December 31, 2015 and for the year then ended.

6 Fair Value Measurements

Investments held by the Master Trust are stated at fair value. Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 820, *"Fair Value Measurements and Disclosures,"* requires enhanced disclosures about investments that are measured and reported at fair value. ASC 820 clarifies the definition of fair value for financial reporting, establishes a framework for measuring fair value and requires additional disclosures about the use of fair value measurements.

The hierarchy established under ASC 820 gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). As required by ASC 820, the Master Trust investments are classified within the fair value hierarchy based on the lowest level of input that is significant to the fair value measurement. The three levels of the fair value hierarchy under ASC 820, and its applicability to the Master Trust investments, are described below:

Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 Quoted prices for similar assets or liabilities, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes investments valued at quoted prices adjusted for legal and contractual restrictions specific to the security.

Level 3 Pricing inputs are unobservable for the asset or liability, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability. Level 3 includes private investments that are supported by little or no market activity.

The determination of where an asset falls in the hierarchy requires significant judgment. The Plan evaluates its hierarchy disclosures each year and changes in economic conditions or valuation techniques may require the transfer of financial instruments from one fair value level to another. However, the Plan expects changes in classifications between levels will be rare. In such instances, the transfer is reported at the beginning of the reporting period.

The methods used to measure the fair value calculation may not be indicative of net realizable value or reflective of future fair values. Furthermore, while management believes the valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Following is a description of the valuation methodologies used for assets and liabilities measured at fair value. There have been no changes in the methodologies used at December 31, 2016 and 2015:

- State and foreign bonds valued at Level 1 are valued at the closing price reported on the active markets on which the individual securities are traded.
- Corporate bonds and state and foreign bonds valued at Level 2 are valued using pricing models maximizing the use of observable inputs for similar securities. This includes basing value on yields currently available on comparable section of issuers with similar credit ratings.
- U.S. government securities valued at Level 1 are valued at the closing price reported on the active markets on which the individual securities are traded and securities valued at Level 2 are valued using pricing models maximizing the use of observable inputs for similar securities.
- Corporate stocks are valued at the closing price reported on the market on which the individual securities are traded.
- Registered investment companies are valued at the net asset value, based on quoted market prices in active markets, of shares held by the Plan at year-end.
- Collective trusts are valued at net asset value as determined by the Trustee. Partnership/joint venture interests and 103-12 investment entities are valued at net asset value as reported by the respective fund managers based upon the fair value of the underlying investments less liabilities.
- Short investments primarily consists of interest rate swaps, which are valued using the income approach taking into account contract terms as well as multiple inputs observed in the marketplace.

The following table sets forth by level, within the fair value hierarchy, the Master Trust's financial instruments at fair value as of December 31, 2016:

	Instruments at Fair Value			
	(Level 1)	(Level 2)	(Level 3)	Total
	$	$	$	$
Investments in the fair value hierarchy:				
Interest-bearing cash	-	1,651,500	-	1,651,500
U.S. government securities	168,618,790	21,705,056	-	190,323,846
Corporate bonds	-	492,265,921	-	492,265,921
Corporate stock - preferred	1,802,236	4,446,953	-	6,249,189
Corporate stock - common	2,181,145	-	-	2,181,145
State and foreign bonds	106,618	12,644,427	-	12,751,045
Registered investment companies	120,712,575	-	-	120,712,575
Short investments	-	57,408	-	57,408
Total investments	293,421,364	532,771,265	-	826,192,629
Investments measured at NAV:				
Partnership / joint venture interests	-	-	-	201,700,678
Collective trusts	-	-	-	330,152,108
103-12 investment entities	-	-	-	1,977,962
Total investments measured at NAV	-	-	-	533,830,748
Total investments	-	-	-	1,360,023,377

The following table sets forth by level, within the fair value hierarchy, the Master Trust's financial instruments at fair value as of December 31, 2015:

	Instruments at Fair Value			
	(Level 1)	(Level 2)	(Level 3)	Total
	$	$	$	$
Investments in the fair value hierarchy:				
Interest-bearing cash	4,192	9,205,954	-	9,210,146
U.S. government securities	155,142,043	93,703,533	-	248,845,576
Corporate bonds	-	337,419,770	-	337,419,770
Corporate stock - preferred	2,602,780	5,339,654	-	7,942,434
Corporate stock - common	133,090,136	-	-	133,090,136
State and foreign bonds	40,522,402	101,582,835	-	142,105,237
Registered investment companies	25,860,370	-	-	25,860,370
Short investments	-	(645,978)	-	(645,978)
Total investments	357,221,923	546,605,768	-	903,827,691
Investments measured at NAV:				
Partnership / joint venture interests	-	-	-	142,004,003
Collective trusts	-	-	-	313,711,436
103-12 investment entities	-	-	-	21,275,224
Total investments measured at NAV	-	-	-	476,990,663
Total investments	-	-	-	1,380,818,354

In accordance with ASC 820, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in Note 4.

There were no significant transfers among investment levels during the years ended December 31, 2016 and 2015, except for the removal of certain investments that were measured at NAV from the fair value hierarchy in accordance with ASU 2015-07.

The following table summarizes investments measured at fair value based on the NAV per share practical expedient as of December 31, 2016:

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
	$	$	$	$
Partnership / joint venture interests (a)	201,700,678	-	Monthly	30 - 60 days
Collective trusts (b)	330,152,108	-	Monthly	30 - 60 days
103-12 investment entities (c)	1,977,962	-	N/A	N/A
Total	533,830,748	-		

The following table summarizes investments measured at fair value based on the NAV per share practical expedient as of December 31, 2015:

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
	$	$	$	$
Partnership / joint venture interests (a)	142,004,003	-	Monthly	30 - 60 days
Collective trusts (b)	313,711,436	-	Monthly	30 - 60 days
103-12 investment entities (c)	21,275,224	-	N/A	N/A
Total	476,990,663	-		

a) The partnership/joint venture interests investments are invested within alternative investments such as private equity and fund of funds. The investment objective of these investments is to achieve longer term growth of capital, which does so with limited liquidity. Within the limited partnerships, there is also a limited partnership that has an investment objective of seeking to outperform the S&P 500. This fund does require monthly notice to provide liquidity.

b) The collective trust investments include an international equity fund and emerging market fixed income bond fund. The investment objective of the international equity fund is to seek capital appreciation through investments in a portfolio of securities issued by companies predominantly in companies contained in the MSCI EAFE Index. The investment objective of the emerging market fixed income fund is to seek long-term total return through investment in a diversified portfolio of emerging markets debt securities and currency instruments.

c) The 103-12 investment entities are invested in alternative investments with specific requirements under ERISA. The investment objective of these investments is to achieve longer term growth of capital, which does so with limited liquidity.

7 Plan Termination

The Company expects to continue the Plan, but reserves the right to terminate the Plan or discontinue contributions subject to the provisions of ERISA.

In the event the Plan is terminated, the net assets of the Plan will be allocated as prescribed by ERISA and its related regulations, generally to provide the following benefits in the following order to the extent of the sufficiency of such assets, or portions thereof:

First, to that portion of a participant's accrued benefit which is derived from mandatory contributions to the Plan.

Second, equally among benefits of participants in the following two subcategories;

- In the case of benefits in any pay status three years prior to termination (at the lowest pay level in that period and at the lowest benefit level under the Plan during the five years prior to termination); and
- In the case of benefits which would have been in pay status three years prior to termination had the participants been retired (and their benefits commenced then), at the lowest benefit level under the Plan during the five years prior to termination.

Third, among all other benefits (if any) of participants under the Plan; guaranteed under the termination insurance provisions of ERISA;

Fourth, among all other nonforfeitable (i.e., uninsured and vested) benefits under the Plan; and

Fifth, among all other benefits under the Plan.

Certain benefits under the Plan are insured by the Pension Benefit Guaranty Corporation (PBGC) if the Plan terminates. However, the PBGC does not guarantee all types of benefits under the Plan and the amount of benefit protection is subject to certain limitations. Vested benefits under the Plan are guaranteed at the level in effect on the date of the Plan's termination. However, there is a statutory ceiling on the amount of an individual's monthly benefit that the PBGC guarantees. For Plan terminations occurring during 2016 and 2015, that ceiling, which is adjusted annually, was $5,369 and $5,011 per month, respectively. Whether a particular participant's accumulated plan benefit will be paid depends on both the priority of those benefits and the level of benefits guaranteed by the PBGC at that time. Some benefits may be fully or partially provided for by the existing assets and the PBGC guaranty.

8 Income Tax Status

The IRS has determined and informed the Company by a letter dated March 13, 2015, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code (IRC). Although the Plan has been amended since receiving the determination letter, the Plan administrator believes that the Plan is designed, and is currently being operated, in compliance with the applicable requirements of the IRC and, therefore, believe that the Plan is qualified, and the related trust is tax exempt.

Accounting principles general accepted in the United States of America require plan management to evaluate tax positions taken by the plan and recognize a tax liability if the plan has taken an uncertain position that more-likely-than-not would not be sustained upon examination by the Internal Revenue Service. As of December 31, 2016 and 2015, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

9 Party-in Interest Transactions

Certain of the Master Trust's assets are invested in funds managed by the Trustee. These transactions qualify as party-in-interest transactions; however, they are exempt from the prohibited transactions rules under ERISA.

10 Prohibited Transaction

The Master Trust had a receivable of $105,879 at year-end 2013 related to a prohibited transaction in 2012 and 2013. This prohibited transaction was comprised of external legal fees that occurred as a result of a 2012 Department of Labor exemption request to allow the Plan sponsor to make Treasury-bill contributions in lieu of cash contributions. The Plan sponsor reimbursed the Master Trust for this amount $105,879 plus interest of $24,088 during 2016 and took all necessary corrective actions to ensure the Plan and the Trust maintain its income tax status as described in Note 8 above. As of December 31, 2016, there are no remaining receivables in the Master Trust attributable to these expenses.

11 Differences Between the Financial Statements and Form 5500

The following table is a reconciliation of net asset available for benefits per the financial statements to the Form 5500:

December 31	2016	2015
	$	$
Net assets available for benefits per the financial statements	745,911,332	756,056,037
Amounts allocated to withdrawing participants	-	-
Net assets available for benefits per Form 5500	745,911,332	756,056,037

The following is a reconciliation of benefits paid to participants per the financial statements to the Form 5500 for the years ended December 31, 2016 and 2015:

For the years ended December 31	2016	2015
	$	$
Benefits paid to participants per financial statements	60,252,361	59,656,168
Less benefits payable at beginning of year	-	(4,653,403)
Benefits paid to participants per Form 5500	60,252,361	55,002,765

Amounts allocated to withdrawing participants are recorded on the Form 5500 for benefit claims that have been processed and approved for payment prior to year-end but not yet paid.

Supplemental schedule

Schedule G, Part III – Schedule of nonexempt transactions

For the year ended December 31, 2016

(a)	(b)	(c)	(d)
Identity of Party Involved	**Relationship to Plan, Employer, or Other Party-in-Interest**	**Description of Transaction Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value**	**Purchase Price**
ABB Inc.	Plan sponsor	Inadvertent use of plan assets for settlor expenses	**$**

(e)	(f)	(g)	(h)	(i)	(j)
Selling Price	**Lease Rental**	**Transaction Expenses**	**Cost of Asset**	**Current Asset Value**	**Net Gain (or Loss) on Each Transaction**
$	**$**	**$**	**$**	**$** 97,620	**$**

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 26
Schedule of Active Participant Data for Cash Balance Plans as of January 1, 2016

Attained Age	Years of Credited Service																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & Over	
	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.	No.	Avg. Bal.
Under 25	11		0		0		0		0		0		0		0		0		0	
25 – 29	77	811	59	5,034	14		0		0		0		0		0		0		0	
30 – 34	71	2,493	155	7,726	77	11,715	3		0		0		0		0		0		0	
35 - 39	68	5,067	143	11,216	100	23,642	60	37,355	2		0		0		0		0		0	
40 - 44	81	3,793	126	15,148	110	31,055	112	53,248	41	52,112	1		0		0		0		0	
45 - 49	92	5,087	136	19,552	118	40,518	141	80,171	78	94,422	67	101,957	1		0		0		0	
50 - 54	80	6,575	147	23,616	122	44,695	240	94,515	86	126,449	153	136,615	46	184,601	3		0		0	
55 - 59	79	3,005	112	25,070	133	52,515	240	100,033	79	121,322	150	162,844	112	169,718	30	208,442	5		0	
60 - 64	37	5,442	92	24,097	76	47,968	143	102,895	32	170,843	114	179,433	38	206,936	72	240,049	32	225,799	2	
65 - 69	5		23	26,295	18		58	128,779	15		36	229,664	8		16		10		14	
70 & Over	4		2		2		10		1		5		0		9		3		3	

Plan Name: ABB Inc. Cash Balance Pension Plan
EIN / PN: 36-3100018 / 301
Plan Sponsor: Cash Balance
Valuation Date: January 1, 2016

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V
Statement of Actuarial Assumptions/Methods

Economic Assumptions

Interest rate basis:

■ Applicable month	September
■ Interest rate basis	3-Segment Rates

Interest rates:

	Reflecting Corridors	Not Reflecting Corridors
■ First segment rate	4.43%	1.34%
■ Second segment rate	5.91%	4.03%
■ Third segment rate	6.65%	5.06%
■ Effective interest rate	5.92%	4.08%

Annual rates of increase

■ Inflation (CPI):	2.00%
■ Compensation:	N/A
■ Future Social Security wage bases:	N/A
■ Statutory limits on compensation and benefits:	N/A

Plan-related expenses $3,300,000

Interest Crediting Rate 4.00% for 2016 and 5.00% per year thereafter.

SCHEDULE SB ATTACHMENTS

Demographic Assumptions

Inclusion date

The valuation date coincident with or next following the date on which the employee becomes a participant.

New or rehired employees

It was assumed there will be no new or rehired employees.

Mortality

- Healthy

Separate rates for non-annuitants (based on RP-2000 “Employees” table without collar or amount adjustments, projected to 2031 using Scale AA) and annuitants (based on RP-2000 “Healthy Annuitants” table without collar or amount adjustments, projected to 2023 using Scale AA.

- Disabled

Alternative disabled life mortality tables as defined under Revenue Ruling 96-7.

Termination

Representative Termination rates (per 100 employees) not due to Disability, Retirement, and Mortality

Representative Termination Rates

Percentage leaving during the year		
Attained Age	Males	Females
20	25.0	41.2
30	11.6	16.7
40	4.2	7.8
50	0.0	1.9

Disability

One-half of the disability rates in the twelfth valuation of the Railroad Retirement Board (set forward 1 year for males and set back 4 years for females).

SCHEDULE SB ATTACHMENTS

Retirement

Rates varying by age, average age 63.

For purposes of determining the Funding Target and Target Normal Cost (both disregarding at-risk assumptions), the rates at which participants retire by age are shown below.

Percentage retiring during the year	
Age	Rate
55	4%
56	5
57-59	6
60	7
61	10
62	12
63	13
64	16
65-69	30
70	100

Age 65 for terminated vested participants.

Benefit commencement date:

- Preretirement death benefit — Upon death.
- Deferred vested benefit — Upon termination of employment, if assumed to elect a lump sum benefit, and at age 65 if assumed to elect an annuity benefit.
- Disability benefit — Upon disability.
- Retirement benefit — Upon termination of employment.

Form of payment

Sold participants are assumed to elect a lump sum benefit. Terminated vested participants are assumed to elect a 5-year certain annuity. For active participants, 50% of eligible participants are assumed to elect a lump sum benefit and 50% are assumed to elect a 5-year certain annuity.

Annuities were calculated from the cash balance accounts using the required methodology in IRS Regulation 1.430(d)-1(f)(5).

SCHEDULE SB ATTACHMENTS

Percent Married	For purposes of valuing the pre-retirement surviving spouse benefit, 85% of deferred vested participants are assumed to be married.
Spouse Age	For purposes of valuing the pre-retirement surviving spouse benefit, wife three years younger than husband.
Timing of benefit payments	Annuity payments are payable monthly at the beginning of the month and lump sum payments are payable on date of decrement.

Methods

Valuation date	First day of plan year.
Funding target	Present value of accrued benefits as required by regulations under IRC §430.
Target normal cost	Present value of benefits expected to accrue during the plan year plus plan-related expenses expected to be paid from plan assets during the plan year as required by regulations under IRC §430.
Actuarial value of assets	Average of the fair market value of assets on the valuation date and 12 and 24 months preceding the valuation date, adjusted for contributions, benefits, plan-related expenses and expected earnings of 6.50% for the 2014 and 2015 plan year (with such expected earnings limited as described in IRS Notice 2009-22). The average asset value must be within 10% of market value, including discounted contributions receivable (discounted using the effective interest rate for the 2015 plan year.) The method of computing the actuarial value of assets complies with rules governing the calculation of such values under the Pension Protection Act of 2006 (PPA). These rules produce smoothed values that reflect the underlying market value of plan assets but fluctuate less than the market value. As a result, the actuarial value of assets will be lower than the market value in some years and greater in other years. However, over the long term under PPA's smoothing rules, the method has a significant bias to produce an actuarial value of assets that is below the market value of assets.
Participant data	Participant data was supplied electronically as of the valuation date by Aon Hewitt on behalf of ABB Inc.

SCHEDULE SB ATTACHMENTS

Benefits not valued	All benefits described in the Plan Provisions section of this report were valued. Willis Towers Watson has reviewed the plan provisions with ABB Inc. and, based on that review, is not aware of any significant benefits required to be valued that were not.

Assumptions Rationale - Significant Economic Assumptions

Interest rate	The basis chosen was selected by the plan sponsor from among choices prescribed by law, all of which are based on observed market data over certain periods of time.
Plan-related Expenses	Plan related expenses are estimated by considering the plan's actual administrative expenses paid from the trust during the prior year.
Inflation (CPI)	This assumption was chosen based on duration weighted swap data provided by Bloomberg as of December 31, 2015.
Interest crediting rate	The plan credits interest to cash balance accounts equal to the highest Consumer Price Index rate for the months of August, September, and October of the previous year plus 300 basis points, but not less than 4% or greater than 9%. The assumption selected is the actual interest crediting rate for 2016 and an assumed interest crediting for 2017 and beyond equal to the CPI assumption plus 300 basis points.
Annuity conversion rate	As required by IRC 430, annuity benefits were calculated from the cash balance accounts using the current required IRC 430 conversion rates.
Assumed return for asset smoothing	The assumed return of 6.20% used for asset smoothing is the expected return on asset assumption chosen by the plan sponsor in the 2016 plan year and we concur with this assumption.

SCHEDULE SB ATTACHMENTS

Assumptions Rationale - Significant Demographic Assumptions

Healthy Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Disabled Mortality	Assumptions used for funding purposes are as prescribed by IRC §430(h).
Termination	The termination rates are based on plan sponsor expectations for the future. Valuation results are reviewed annually with respect to gains and losses caused by termination patterns different than assumed, as well as annual consideration of whether conditions have changed that would be expected to produce different results in the future.
Disability	The disability rates are based on plan sponsor expectations for the future. Valuation results are reviewed annually with respect to gains and losses caused by disability patterns different than assumed, as well as annual consideration of whether conditions have changed that would be expected to produce different results in the future.
Retirement	The retirement rates are based on plan sponsor expectations and reflect an experience analysis covering the period 2010 to 2014. Valuation results are reviewed annually with respect to gains and losses caused by retirement patterns different than assumed, as well as annual consideration of whether conditions have changed that would be expected to produce different results in the future.

Source of Prescribed Methods

Funding methods	The methods used for funding purposes include the method of determining plan assets, are “prescribed methods set by law”, as defined in the actuarial standards of practice (ASOPs). These methods are required by IRC §430, or were selected by the plan sponsor from a range of methods permitted by IRC §430.

SCHEDULE SB ATTACHMENTS

Changes in Assumptions and Methods

Change in assumptions since prior valuation

In addition to the prescribed change in the mortality table, the following changes in assumptions were made as part of this valuation:

- The plan's effective interest rate decreased 17 basis points compared to the prior year (5.92% vs. 6.09%).
- The assumed plan-related expenses added to the target normal cost were changed from $2,700,000 to $3,300,000.
- The interest crediting rate changed from 4.70% for 2015 and 5.00% thereafter to 4.00% for 2016 and 5.00% thereafter.
- The lump sum election percentage and retirement rates were updated to better reflect expected future experience and are based on an experience analysis for the period 2010 to 2014.

Change in methods since prior valuation

There have been no changes in methods since the prior valuation.

SCHEDULE SB (Form 5500)

Department of the Treasury
Internal Revenue Service

Department of Labor
Employee Benefits Security Administration

Pension Benefit Guaranty Corporation

Single-Employer Defined Benefit Plan Actuarial Information

This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).

▶ **File as an attachment to Form 5500 or 5500-SF.**

OMB No. 1210-0110

2016

This Form is Open to Public Inspection

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of $1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan
ABB INC. CASH BALANCE PENSION PLAN

B Three-digit plan number (PN) ▶ 301

C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF
ABB INC.

D Employer Identification Number (EIN)
36-3100018

E Type of plan: [X] Single [ ] Multiple-A [ ] Multiple-B

F Prior year plan size: [ ] 100 or fewer [ ] 101-500 [X] More than 500

Part I Basic Information

1 Enter the valuation date: Month 01 Day 01 Year 2016

2 Assets:

a Market value	**2a**	757,951,868
b Actuarial value	**2b**	801,829,801

3 Funding target/participant count breakdown

	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	4,682	183,816,134	183,816,134
b For terminated vested participants	4,844	177,980,670	177,980,670
c For active participants	4,641	332,150,552	332,150,552
d Total	14,167	693,947,356	693,947,356

4 If the plan is in at-risk status, check the box and complete lines (a) and (b) [ ]

a Funding target disregarding prescribed at-risk assumptions	**4a**	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	**4b**	
5 Effective interest rate	**5**	5.92%
6 Target normal cost	**6**	3,300,000

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE

Signature of actuary — Date: 9/25/2017

John D Steele — Type or print name of actuary

1705326 — Most recent enrollment number

Towers Watson Delaware Inc. — Firm name

203-326-5400 — Telephone number (including area code)

ONE STAMFORD PLAZA
263 TRESSER BOULEVARD
Stamford CT 06901-3226
Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions [ ]

Part II Beginning of Year Carryover and Prefunding Balances

		(a) Carryover balance	(b) Prefunding balance
7	Balance at beginning of prior year after applicable adjustments (line 13 from prior year)	86,617,011	0
8	Portion elected for use to offset prior year's funding requirement (line 35 from prior year)	0	0
9	Amount remaining (line 7 minus line 8)	86,617,011	0
10	Interest on line 9 using prior year's actual return of -0.97%	-840,185	0
11	Prior year's excess contributions to be added to prefunding balance:		
	a Present value of excess contributions (line 38a from prior year)		0
	b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of 6.09%		0
	b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		0
	c Total available at beginning of current plan year to add to prefunding balance		0
	d Portion of (c) to be added to prefunding balance		0
12	Other reductions in balances due to elections or deemed elections	0	0
13	Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)	85,776,826	0

Part III Funding Percentages

14	Funding target attainment percentage	14	103.18%
15	Adjusted funding target attainment percentage	15	115.54%
16	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	114.98%
17	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

18 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
			Totals ► 18(b)	0	18(c) 0

19	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:		
	a Contributions allocated toward unpaid minimum required contributions from prior years	19a	0
	b Contributions made to avoid restrictions adjusted to valuation date	19b	0
	c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	0

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year? [ ] Yes [X] No

b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? [ ] Yes [ ] No

c If line 20a is "Yes," see instructions and complete the following table as applicable:

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:

a Segment rates:

1st segment:	2nd segment:	3rd segment:	☐ N/A, full yield curve used
4.43 %	5.91 %	6.65 %	

b Applicable month (enter code)	**21b**	4
22 Weighted average retirement age	**22**	63

23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment		☒ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment		☐ Yes ☒ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment		☒ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	**27**	

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	**28**	0
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	**29**	0
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	**30**	0

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):		
a Target normal cost (line 6)	**31a**	3,300,000
b Excess assets, if applicable, but not greater than line 31a	**31b**	3,300,000

32 Amortization installments:	Outstanding Balance	Installment
a Net shortfall amortization installment	0	0
b Waiver amortization installment	0	0

33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	**33**	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	**34**	0

	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement	0	0	0

36 Additional cash requirement (line 34 minus line 35)	**36**	0
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	**37**	0
38 Present value of excess contributions for current year (see instructions)		
a Total (excess, if any, of line 37 over line 36)	**38a**	0
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	**38b**	0
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	**39**	0
40 Unpaid minimum required contributions for all years	**40**	0

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:

a Schedule elected ☐ 2 plus 7 years ☐ 15 years

b Eligible plan year(s) for which the election in line 41a was made ☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011

42 Amount of acceleration adjustment	**42**	0
43 Excess installment acceleration amount to be carried over to future plan years	**43**	0

SCHEDULE SB ATTACHMENTS

Schedule SB – Statement by Enrolled Actuary

Plan Sponsor	ABB Inc.
EIN/PN	36-3100018/301
Plan Name	ABB Inc. Cash Balance Pension Plan
Valuation Date	January 1, 2016
Enrolled Actuary	John D. Steele
Enrollment Number	17-05326

The actuarial assumptions that are not mandated by IRC § 430 and regulations, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Item 18 of Schedule SB were listed in reliance on information provided by the plan administrator and/or trustee.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 22
Description of Weighted Average Retirement Age
as of January 1, 2016

See Part V – Statement of Actuarial Assumptions and Methods for retirement rates. The average retirement age for Line 22 was calculated by determining the average age at retirement for those current active participants expected to reach retirement, based on all current decrements assumed.

Age	Retirement Rates	Lives at each Age	Retirements at each Age	Weighted Avg Age
55	4.00%	1.000000	0.040000	2.20
56	5.00%	0.960000	0.048000	2.69
57	6.00%	0.912000	0.054720	3.12
58	6.00%	0.857280	0.051437	2.98
59	6.00%	0.805843	0.048351	2.85
60	7.00%	0.757493	0.053024	3.18
61	10.00%	0.704468	0.070447	4.30
62	12.00%	0.634021	0.076083	4.72
63	13.00%	0.557939	0.072532	4.57
64	16.00%	0.485407	0.077665	4.97
65	30.00%	0.407742	0.122322	7.95
66	30.00%	0.285419	0.085626	5.65
67	30.00%	0.199793	0.059938	4.02
68	30.00%	0.139855	0.041957	2.85
69	30.00%	0.097899	0.029370	2.03
70	100.00%	0.068529	0.068529	4.80

Average age at retirement	62.9
Nearest whole age	**63.0**

Plan Name:	ABB Inc. Cash Balance Pension Plan
EIN / PN:	36-3100018 / 301
Plan Sponsor:	ABB Inc.
Valuation Date:	January 1, 2016

SCHEDULE SB ATTACHMENTS

Schedule SB, Part V
Summary of Plan Provisions

Plan Sponsor

ABB Inc.

Plan

ABB Inc. Cash Balance Pension Plan

A. BASIC PROVISIONS

1. **Effective Date:** The Plan was adopted on December 1, 1950 and amendments through January 1, 2016 are reflected in the plan provisions.
2. **Plan Year:** The twelve-month period ending December 31, 2016.
3. **Coverage and Participation:** First day of the month following employee commencement date. Accruals under the plan were frozen as of December 31, 2011. There will be no new participants in this plan after December 31, 2011.
4. **Vesting:** 100% after 3 years of vesting service. All participants were vested as of December 31, 2011.
5. **Normal Retirement Date:** First day of the month following attainment of age 65.
6. **Early Retirement Benefit Eligibility:** First day of the month following attainment of age 55 and completion of 5 years of service (age 55 for Combustion Engineering employees as of December 31, 1991).
7. **Disability Retirement Eligibility:** Upon total and permanent disablement.

B. BENEFIT PROVISIONS

1. **Retirement Benefit Formula:** For each year of service, a member's account will be credited with the following percentage of salary:

Age	Percentage
Under 25	2.5%
25 - 29	3.0%
30 - 34	3.5%
35 - 39	4.0%
40 - 44	4.5%
45 - 49	5.0%
50 - 54	5.5%
55 - 59	6.0%
60 and over	6.5%

An additional 2.25% of salary in excess of one-half the Social Security Taxable Wage Base is credited each year.

Pay credits were frozen as of December 31, 2011.

2. **Transitional Credits:** A member of the prior plan who as of the date of conversion had attained certain age and service conditions is credited with an additional percentage of his salary for each year of service.

3. **Interest Credits:** Interest credits on each member's account balance in any year are equal to the Cost of Living Escalator Percentage, which is the highest Consumer Price Index rate for the months of August, September, and October of the previous year plus 300 basis points, but not less than 4% or greater than 9%. The Percentage was 8% for the plan years beginning January 1, 1992 through January 1, 2001. The Percentage was 6.7% for the plan year beginning January 1, 2002, 5.93% for the plan year beginning January 1, 2003, 6.00% for the plan year beginning January 1, 2004, 6.20% for the plan year beginning January 1, 2005, 7.70% for the plan year beginning January 1, 2006, 6.80% for the plan year beginning January 1, 2007, 6.50% for the plan year beginning January 1, 2008, 8.40% for the plan year beginning January 1, 2009, 4.00% for the plan year beginning January 1, 2010, 4.20% for the plan year beginning January 1, 2011, 6.90% for the plan year beginning January 1, 2012, 5.20% for the plan year beginning January 1, 2013, 4.50% for the plan year beginning January 1, 2014, 4.70% for the plan year beginning January 1, 2015 and 4.00% for the plan year beginning January 1, 2016.

4. **Accrued Benefit under Prior Plan:** The accrued benefit under the prior plan, excluding the Retirement Income Plan for Applied Automation, Inc., as of the date of conversion was converted to a lump sum amount as a beginning account balance. Such conversion was based upon an 8% interest rate for the January 1, 1994, January 1, 1992 and December 1, 1988 conversions, and 7.25% for December 1, 1989 conversions, and an assumed retirement age of 65.

   The accrued benefit under the Applied Automation Plan will be indexed with increases in final average earnings and may be converted to a lump sum at termination.

5. **Accrued Monthly Annuity Benefit:** Equal to a five-year certain and continuous annuity payable at age 65 that is actuarial equivalent to the account balance. In no event will the accrued benefit be less than the benefit accrued under the prior plan as of the date of conversion.

6. **Payment of Benefits:**

   a. **Normal Retirement:** A monthly annuity calculated in accordance with Item B.5 and payable in accordance with Item B.7.

   b. **Early Retirement:** A monthly annuity calculated in accordance with Item B.5 and payable in accordance with Item B.7 at age 65, or payable earlier in an actuarially reduced amount.

   c. **Disability Retirement:** A member shall be eligible for additional credits each year in accordance with Items B.1, B.2, and B.3 based upon the member's salary in effect at the time of disability retirement. The additional credits shall cease upon the earlier of recovery or attainment of age 65. A member may elect to receive his accrued benefit at any time, at which time no further credits shall be granted.

   d. **Vested Termination:** A monthly annuity calculated in accordance with Item B.5 and payable at age 65 in accordance with Item B.7 or payable earlier in an actuarially reduced amount.

e. **Death:** In the event of death of a vested employee prior to retirement, his beneficiary will be entitled to the actuarially equivalent lump sum value of the employee's accrued benefit. If the beneficiary is the employee's surviving spouse, an actuarially equivalent annuity may be received.

7. **Normal Form of Benefit:** For a member who does not have a spouse, the automatic form of benefit is a monthly life annuity with a five-year certain feature. For married members, the automatic form of benefit is an actuarially equivalent 50% joint and survivor annuity with a five year certain feature. Alternatively, a member may elect to receive an actuarially equivalent lump sum.

8. **Preserved Early Retirement Provision:**

   Eligibility: 1. Prior ABB or Power T&D Active members whose age plus vesting service equalled 65 or more on their date of conversion. 2. Active members on their date of conversion who had attained age 55 or whose age plus years of benefit service equalled 60 or more as of that date.

   Benefit: The benefit for service prior to the effective date shall be no less than the normal retirement or early retirement benefit accrued under the prior plan, as applicable.

9. **Minimum Benefit for Certain Prior Flakt Plan Members:**

   Eligibility: Members of the prior Flakt Plan as of December 31, 1993 that were (i) 35-39 and vested, or (ii) at least age 40.

   Benefit: The participant will receive their cash balance account, plus the difference in the value of a life annuity at their date of termination determined under the prior Flakt plan and the life annuity equivalent of the cash balance account at their date of termination. If applicable, this additional benefit will be paid as a life annuity under the terms of the prior Flakt Plan.

10. **Changes Since the Prior Valuation:**

    To our knowledge, no changes were made to the Plan or are pending.

SCHEDULE SB ATTACHMENTS

Schedule SB, Line 24
Change in Actuarial Assumptions

The following changes were made to the actuarial assumptions for 2016 in order to better align with expected future experience:

- The amount included in the Target Normal Cost for plan-related expenses was changed from $2,700,000 to $3,300,000 to more closely align with recent experience.
- The interest crediting rate was changed from 4.70% for 2015 and 5.00% thereafter to 4.00% for 2016 and 5.00% thereafter.
- The lump sum election percentage and retirement rates were updated to better reflect expected future experience and are based on an experience analysis for the period 2010 to 2014.

Plan Name:	ABB Inc. Cash Balance Pension Plan
EIN / PN:	36-3100018 / 301
Plan Sponsor:	ABB Inc.
Valuation Date:	January 1, 2016