

**Form 604**  
Corporations Act 2001  
Section 671B

**Notice of change of interests of substantial holder**

To Company Name/Scheme  
ACN/ARSN

AGL Energy Limited  
115 061 375

**1. Details of substantial holder (1)**

Name

Vanguard Group (The Vanguard Group, Inc. and its controlled entities including those listed in Annexure A)

ACN/ARSN (if applicable)

N/A

There was a change in the interests of the substantial holder on

22 November 2019

The previous notice was given to the company on

14 June 2018

The previous notice was dated

14 June 2018

**2. Previous and present voting power**

The total number of votes attached to all the voting shares in the company or voting interests in the scheme that the substantial holder or an associate (2) had a relevant interest (3) in when last required, and when now required, to give a substantial holding notice to the company or scheme, are as follows:

Class of securities (4)	Previous notice		Present notice	
	Person's votes	Voting power (5)	Person's votes	Voting power (5)
Ordinary	32,944,083	5.023%	38,926,303	6.035%

**3. Changes in relevant interests**

Particulars of each change in, or change in the nature of, a relevant interest of the substantial holder or an associate in voting securities of the company or scheme, since the substantial holder was last required to give a substantial holding notice to the company or scheme are as follows:

Date of change	Person whose relevant interest changed	Nature of change (6)	Consideration given in relation to change (7)	Class and number of securities affected	Person's votes affected
See Annexure A					

**4. Present relevant interests**

Particulars of each relevant interest of the substantial holder in voting securities after the change are as follows:

Holder of relevant interest	Registered holder of securities	Person entitled to be registered as holder (8)	Nature of relevant interest (6)	Class and number of securities	Person's votes
Vanguard Group	Brown Brothers Harriman	Various funds and other accounts of Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 1,730,886	1,730,886
Vanguard Group	BNY Mellon	Various funds and other accounts of Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 2,682,435	2,682,435
Vanguard Group	JP Morgan Chase Bank, N.A.	Various funds and other accounts of Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 19,366,196	19,366,196
Vanguard Group	Citibank	Various funds and other accounts of Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 10,933	10,933
Vanguard Group	State Street Bank and Trust Company	Various funds and other accounts of Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 4,689,493	4,689,493
Vanguard Group	Various others	Various funds and other accounts of Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 10,446,360	10,446,360

**5. Changes in association**

The persons who have become associates (2) of, ceased to be associates of, or have changed the nature of their association (9) with, the substantial holder in relation to voting interests in the company or scheme are as follows:

Name and ACN/ARSN (if applicable)	Nature of association
N/A	N/A

**6. Addresses**

The addresses of persons named in this form are as follows:

Name	Address
Vanguard Group	P.O. Box 2600, V26 Valley Forge, PA 19482 USA

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**Signature**

print name Keith Delgado capacity Compliance Manager

sign here  date 26 November 2019

#### DIRECTIONS

- (1) If there are a number of substantial holders with similar or related relevant interests (eg. a corporation and its related corporations, or the manager and trustee of an equity trust), the names could be included in an annexure to the form. If the relevant interests of a group of persons are essentially similar, they may be referred to throughout the form as a specifically named group if the membership of each group, with the names and addresses of members is clearly set out in paragraph 6 of the form.
- (2) See the definition of "associate" in section 9 of the Corporations Act 2001.
- (3) See the definition of "relevant interest" in sections 608 and 671B(7) of the Corporations Act 2001.
- (4) The voting shares of a company constitute one class unless divided into separate classes.
- (5) The person's votes divided by the total votes in the body corporate or scheme multiplied by 100.
- (6) Include details of:
  - (a) any relevant agreement or other circumstances because of which the change in relevant interest occurred. If subsection 671B(4) applies, a copy of any document setting out the terms of any relevant agreement, and a statement by the person giving full and accurate details of any contract, scheme or arrangement, must accompany this form, together with a written statement certifying this contract, scheme or arrangement; and
  - (b) any qualification of the power of a person to exercise, control the exercise of, or influence the exercise of, the voting powers or disposal of the securities to which the relevant interest relates (indicating clearly the particular securities to which the qualification applies).

See the definition of "relevant agreement" in section 9 of the Corporations Act 2001.

- (7) Details of the consideration must include any and all benefits, money and other, that any person from whom a relevant interest was acquired has, or may, become entitled to receive in relation to that acquisition. Details must be included even if the benefit is conditional on the happening or not of a contingency. Details must be included of any benefit paid on behalf of the substantial holder or its associate in relation to the acquisitions, even if they are not paid directly to the person from whom the relevant interest was acquired.
- (8) If the substantial holder is unable to determine the identity of the person (eg. if the relevant interest arises because of an option) write "unknown".
- (9) Give details, if appropriate, of the present association and any change in that association since the last substantial holding notice.

To Company  
ACN/ARSN

AGL Energy Limited  
115 061 375

Substantial Holder Name  
ACN/ARSN

Vanguard Group  
N/A

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
6/14/2018	The Vanguard Group, Inc.	BUY	21.46	Ordinary	844	844
6/15/2018	The Vanguard Group, Inc.	SELL	21.64	Ordinary	(73,963)	(73,963)
6/15/2018	The Vanguard Group, Inc.	SELL	21.64	Ordinary	(16,847)	(16,847)
6/15/2018	The Vanguard Group, Inc.	SELL	21.64	Ordinary	(5,984)	(5,984)
6/19/2018	The Vanguard Group, Inc.	BUY	21.80	Ordinary	38,060	38,060
6/20/2018	The Vanguard Group, Inc.	BUY	21.82	Ordinary	31,080	31,080
6/20/2018	The Vanguard Group, Inc.	BUY	21.82	Ordinary	6,215	6,215
6/26/2018	The Vanguard Group, Inc.	BUY	22.07	Ordinary	40,568	40,568
6/27/2018	The Vanguard Group, Inc.	SELL	22.09	Ordinary	(486)	(486)
6/29/2018	The Vanguard Group, Inc.	BUY	22.48	Ordinary	23,878	23,878
6/29/2018	The Vanguard Group, Inc.	BUY	22.48	Ordinary	28,618	28,618
7/3/2018	The Vanguard Group, Inc.	BUY	22.63	Ordinary	825	825
7/4/2018	The Vanguard Group, Inc.	SELL	22.82	Ordinary	(13,033)	(13,033)
7/4/2018	The Vanguard Group, Inc.	BUY	22.72	Ordinary	4,659	4,659
7/4/2018	The Vanguard Group, Inc.	BUY	22.76	Ordinary	37,211	37,211
7/5/2018	The Vanguard Group, Inc.	BUY	23.03	Ordinary	367	367
7/5/2018	The Vanguard Group, Inc.	BUY	23.03	Ordinary	59,291	59,291
7/6/2018	The Vanguard Group, Inc.	BUY	23.15	Ordinary	3,798	3,798
7/6/2018	The Vanguard Group, Inc.	BUY	23.16	Ordinary	261	261
7/6/2018	The Vanguard Group, Inc.	BUY	23.23	Ordinary	1,980	1,980
7/11/2018	The Vanguard Group, Inc.	BUY	22.24	Ordinary	723	723
7/12/2018	The Vanguard Group, Inc.	BUY	21.27	Ordinary	13,001	13,001
7/12/2018	The Vanguard Group, Inc.	SELL	21.70	Ordinary	(10,504)	(10,504)
7/12/2018	The Vanguard Group, Inc.	SELL	21.73	Ordinary	(2,932)	(2,932)
7/12/2018	The Vanguard Group, Inc.	SELL	21.27	Ordinary	(332)	(332)
7/13/2018	The Vanguard Group, Inc.	BUY	21.91	Ordinary	63	63
7/17/2018	The Vanguard Group, Inc.	BUY	21.43	Ordinary	337	337
7/19/2018	The Vanguard Group, Inc.	BUY	21.48	Ordinary	355	355
7/20/2018	The Vanguard Group, Inc.	BUY	21.78	Ordinary	4,237	4,237
7/20/2018	The Vanguard Group, Inc.	BUY	21.75	Ordinary	1,650	1,650
7/20/2018	The Vanguard Group, Inc.	SELL	21.78	Ordinary	(6,309)	(6,309)
7/23/2018	The Vanguard Group, Inc.	SELL	21.65	Ordinary	(1,785)	(1,785)
7/24/2018	The Vanguard Group, Inc.	BUY	21.57	Ordinary	355	355
7/24/2018	The Vanguard Group, Inc.	BUY	21.57	Ordinary	783	783
7/24/2018	The Vanguard Group, Inc.	SELL	21.60	Ordinary	(285)	(285)
7/25/2018	The Vanguard Group, Inc.	SELL	21.54	Ordinary	(458)	(458)
7/25/2018	The Vanguard Group, Inc.	SELL	21.60	Ordinary	(1,785)	(1,785)
7/25/2018	The Vanguard Group, Inc.	SELL	21.60	Ordinary	(8,925)	(8,925)
7/25/2018	The Vanguard Group, Inc.	SELL	21.60	Ordinary	(1,190)	(1,190)
7/27/2018	The Vanguard Group, Inc.	SELL	21.73	Ordinary	(3,504)	(3,504)
7/30/2018	The Vanguard Group, Inc.	SELL	21.72	Ordinary	(3,188)	(3,188)
7/31/2018	The Vanguard Group, Inc.	BUY	21.99	Ordinary	440	440
8/1/2018	The Vanguard Group, Inc.	BUY	21.94	Ordinary	44,797	44,797
8/1/2018	The Vanguard Group, Inc.	SELL	22.20	Ordinary	(247)	(247)
8/2/2018	The Vanguard Group, Inc.	SELL	21.96	Ordinary	(5,950)	(5,950)
8/3/2018	The Vanguard Group, Inc.	SELL	21.83	Ordinary	(2,041)	(2,041)
8/3/2018	The Vanguard Group, Inc.	BUY	21.83	Ordinary	495	495
8/7/2018	The Vanguard Group, Inc.	BUY	21.98	Ordinary	35,270	35,270
8/9/2018	The Vanguard Group, Inc.	BUY	21.26	Ordinary	12,248	12,248
8/10/2018	The Vanguard Group, Inc.	SELL	20.60	Ordinary	(14,280)	(14,280)
8/10/2018	The Vanguard Group, Inc.	SELL	20.62	Ordinary	(11,973)	(11,973)
8/13/2018	The Vanguard Group, Inc.	BUY	20.79	Ordinary	893	893
8/14/2018	The Vanguard Group, Inc.	BUY	21.05	Ordinary	33,017	33,017
8/15/2018	The Vanguard Group, Inc.	SELL	21.62	Ordinary	(7,140)	(7,140)
8/15/2018	The Vanguard Group, Inc.	BUY	21.38	Ordinary	34,334	34,334
8/16/2018	The Vanguard Group, Inc.	BUY	21.42	Ordinary	1,272	1,272
8/16/2018	The Vanguard Group, Inc.	SELL	21.37	Ordinary	(16,326)	(16,326)
8/17/2018	The Vanguard Group, Inc.	BUY	21.61	Ordinary	5,932	5,932
8/17/2018	The Vanguard Group, Inc.	BUY	21.61	Ordinary	32,422	32,422
8/17/2018	The Vanguard Group, Inc.	BUY	21.63	Ordinary	1,155	1,155
8/21/2018	The Vanguard Group, Inc.	BUY	21.36	Ordinary	551	551
8/21/2018	The Vanguard Group, Inc.	BUY	21.36	Ordinary	498	498

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
8/22/2018	The Vanguard Group, Inc.	BUY	20.67	Ordinary	32,038	32,038
8/24/2018	The Vanguard Group, Inc.	BUY	20.57	Ordinary	1,815	1,815
8/27/2018	The Vanguard Group, Inc.	SELL	20.59	Ordinary	(14,698)	(14,698)
8/28/2018	The Vanguard Group, Inc.	BUY	20.66	Ordinary	355	355
9/5/2018	The Vanguard Group, Inc.	SELL	20.04	Ordinary	(435)	(435)
9/5/2018	The Vanguard Group, Inc.	BUY	20.28	Ordinary	36,547	36,547
9/5/2018	The Vanguard Group, Inc.	SELL	20.47	Ordinary	(266)	(266)
9/6/2018	The Vanguard Group, Inc.	BUY	20.16	Ordinary	33,990	33,990
9/7/2018	The Vanguard Group, Inc.	BUY	19.63	Ordinary	9,230	9,230
9/7/2018	The Vanguard Group, Inc.	BUY	19.63	Ordinary	2,932	2,932
9/10/2018	The Vanguard Group, Inc.	BUY	19.71	Ordinary	1,097	1,097
9/12/2018	The Vanguard Group, Inc.	SELL	19.57	Ordinary	(43,432)	(43,432)
9/12/2018	The Vanguard Group, Inc.	BUY	19.55	Ordinary	4,398	4,398
9/12/2018	The Vanguard Group, Inc.	SELL	19.70	Ordinary	(283)	(283)
9/17/2018	The Vanguard Group, Inc.	BUY	19.36	Ordinary	5,404	5,404
9/18/2018	The Vanguard Group, Inc.	BUY	19.69	Ordinary	584	584
9/21/2018	The Vanguard Group, Inc.	BUY	19.38	Ordinary	4,401	4,401
9/21/2018	The Vanguard Group, Inc.	BUY	19.38	Ordinary	5,164	5,164
9/21/2018	The Vanguard Group, Inc.	SELL	19.38	Ordinary	(19,629)	(19,629)
9/21/2018	The Vanguard Group, Inc.	SELL	19.38	Ordinary	(7,842)	(7,842)
9/25/2018	The Vanguard Group, Inc.	BUY	19.11	Ordinary	311	311
9/25/2018	The Vanguard Group, Inc.	BUY	19.23	Ordinary	56,515	56,515
9/26/2018	The Vanguard Group, Inc.	SELL	19.59	Ordinary	(229)	(229)
9/26/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	3,032	3,032
9/26/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	7,580	7,580
9/26/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	6,064	6,064
9/28/2018	The Vanguard Group, Inc.	BUY	19.50	Ordinary	430	430
10/1/2018	The Vanguard Group, Inc.	BUY	19.47	Ordinary	4,548	4,548
10/2/2018	The Vanguard Group, Inc.	BUY	19.50	Ordinary	12,128	12,128
10/2/2018	The Vanguard Group, Inc.	SELL	19.48	Ordinary	(282)	(282)
10/2/2018	The Vanguard Group, Inc.	SELL	19.50	Ordinary	(1,780)	(1,780)
10/3/2018	The Vanguard Group, Inc.	BUY	19.80	Ordinary	4,548	4,548
10/3/2018	The Vanguard Group, Inc.	BUY	19.80	Ordinary	3,474	3,474
10/9/2018	The Vanguard Group, Inc.	BUY	19.66	Ordinary	36,033	36,033
10/9/2018	The Vanguard Group, Inc.	BUY	19.62	Ordinary	9,843	9,843
10/11/2018	The Vanguard Group, Inc.	BUY	19.03	Ordinary	2,949	2,949
10/11/2018	The Vanguard Group, Inc.	BUY	18.90	Ordinary	3,744	3,744
10/15/2018	The Vanguard Group, Inc.	BUY	18.40	Ordinary	6,240	6,240
10/16/2018	The Vanguard Group, Inc.	BUY	18.58	Ordinary	42,555	42,555
10/16/2018	The Vanguard Group, Inc.	SELL	18.40	Ordinary	(297)	(297)
10/18/2018	The Vanguard Group, Inc.	SELL	18.97	Ordinary	(337)	(337)
10/18/2018	The Vanguard Group, Inc.	BUY	18.83	Ordinary	22,331	22,331
10/19/2018	The Vanguard Group, Inc.	BUY	19.17	Ordinary	3,744	3,744
10/19/2018	The Vanguard Group, Inc.	BUY	19.17	Ordinary	4,548	4,548
10/23/2018	The Vanguard Group, Inc.	BUY	18.65	Ordinary	4,095	4,095
10/23/2018	The Vanguard Group, Inc.	BUY	18.72	Ordinary	36,564	36,564
10/24/2018	The Vanguard Group, Inc.	BUY	18.48	Ordinary	393	393
10/25/2018	The Vanguard Group, Inc.	BUY	18.07	Ordinary	37,983	37,983
10/25/2018	The Vanguard Group, Inc.	BUY	17.95	Ordinary	3,790	3,790
10/26/2018	The Vanguard Group, Inc.	BUY	17.58	Ordinary	1,011	1,011
10/26/2018	The Vanguard Group, Inc.	BUY	17.58	Ordinary	1,911	1,911
10/26/2018	The Vanguard Group, Inc.	BUY	17.82	Ordinary	522	522
10/30/2018	The Vanguard Group, Inc.	BUY	17.90	Ordinary	10,229	10,229
10/30/2018	The Vanguard Group, Inc.	BUY	17.89	Ordinary	48,631	48,631
10/31/2018	The Vanguard Group, Inc.	SELL	18.00	Ordinary	(1,033)	(1,033)
10/31/2018	The Vanguard Group, Inc.	BUY	18.08	Ordinary	15,729	15,729
10/31/2018	The Vanguard Group, Inc.	BUY	18.03	Ordinary	5,306	5,306
11/1/2018	The Vanguard Group, Inc.	SELL	17.95	Ordinary	(42,973)	(42,973)
11/1/2018	The Vanguard Group, Inc.	BUY	17.97	Ordinary	7,580	7,580
11/1/2018	The Vanguard Group, Inc.	BUY	17.86	Ordinary	9,424	9,424
11/2/2018	The Vanguard Group, Inc.	SELL	17.82	Ordinary	(14,745)	(14,745)
11/2/2018	The Vanguard Group, Inc.	BUY	17.74	Ordinary	49,213	49,213
11/5/2018	The Vanguard Group, Inc.	SELL	17.95	Ordinary	(4,932)	(4,932)
11/7/2018	The Vanguard Group, Inc.	BUY	18.20	Ordinary	6,064	6,064
11/9/2018	The Vanguard Group, Inc.	SELL	17.90	Ordinary	(1,293)	(1,293)
11/9/2018	The Vanguard Group, Inc.	BUY	17.70	Ordinary	675	675
11/12/2018	The Vanguard Group, Inc.	BUY	18.10	Ordinary	4,548	4,548
11/13/2018	The Vanguard Group, Inc.	BUY	18.17	Ordinary	1,435	1,435
11/13/2018	The Vanguard Group, Inc.	BUY	18.39	Ordinary	2,694	2,694

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
11/14/2018	The Vanguard Group, Inc.	BUY	18.18	Ordinary	6,064	6,064
11/14/2018	The Vanguard Group, Inc.	BUY	18.18	Ordinary	4,548	4,548
11/15/2018	The Vanguard Group, Inc.	BUY	18.54	Ordinary	3,792	3,792
11/15/2018	The Vanguard Group, Inc.	BUY	18.54	Ordinary	712	712
11/16/2018	The Vanguard Group, Inc.	BUY	18.46	Ordinary	11,181	11,181
11/21/2018	The Vanguard Group, Inc.	BUY	18.48	Ordinary	6,064	6,064
11/23/2018	The Vanguard Group, Inc.	BUY	18.70	Ordinary	78	78
11/26/2018	The Vanguard Group, Inc.	SELL	18.52	Ordinary	(473)	(473)
11/28/2018	The Vanguard Group, Inc.	BUY	18.96	Ordinary	624	624
11/28/2018	The Vanguard Group, Inc.	BUY	18.96	Ordinary	3,744	3,744
11/28/2018	The Vanguard Group, Inc.	BUY	18.96	Ordinary	3,790	3,790
11/28/2018	The Vanguard Group, Inc.	BUY	18.96	Ordinary	4,053	4,053
11/30/2018	The Vanguard Group, Inc.	BUY	18.74	Ordinary	15,282	15,282
11/30/2018	The Vanguard Group, Inc.	SELL	18.74	Ordinary	(18,183)	(18,183)
11/30/2018	The Vanguard Group, Inc.	BUY	18.47	Ordinary	42,702	42,702
11/30/2018	The Vanguard Group, Inc.	BUY	18.88	Ordinary	264	264
12/3/2018	The Vanguard Group, Inc.	BUY	19.08	Ordinary	528	528
12/3/2018	The Vanguard Group, Inc.	SELL	19.08	Ordinary	(8,413)	(8,413)
12/4/2018	The Vanguard Group, Inc.	BUY	19.01	Ordinary	6,627	6,627
12/4/2018	The Vanguard Group, Inc.	BUY	19.12	Ordinary	35,627	35,627
12/4/2018	The Vanguard Group, Inc.	BUY	18.86	Ordinary	3,792	3,792
12/4/2018	The Vanguard Group, Inc.	BUY	18.86	Ordinary	6,064	6,064
12/4/2018	The Vanguard Group, Inc.	BUY	19.11	Ordinary	46,920	46,920
12/5/2018	The Vanguard Group, Inc.	BUY	19.12	Ordinary	3,275	3,275
12/5/2018	The Vanguard Group, Inc.	BUY	18.97	Ordinary	15,778	15,778
12/5/2018	The Vanguard Group, Inc.	BUY	18.97	Ordinary	115	115
12/6/2018	The Vanguard Group, Inc.	BUY	19.42	Ordinary	4,420	4,420
12/6/2018	The Vanguard Group, Inc.	SELL	19.42	Ordinary	(335)	(335)
12/6/2018	The Vanguard Group, Inc.	BUY	19.47	Ordinary	2,844	2,844
12/7/2018	The Vanguard Group, Inc.	BUY	19.59	Ordinary	5,306	5,306
12/7/2018	The Vanguard Group, Inc.	BUY	19.59	Ordinary	6,064	6,064
12/10/2018	The Vanguard Group, Inc.	BUY	19.47	Ordinary	3,510	3,510
12/10/2018	The Vanguard Group, Inc.	BUY	19.49	Ordinary	10,123	10,123
12/11/2018	The Vanguard Group, Inc.	BUY	19.60	Ordinary	35,748	35,748
12/11/2018	The Vanguard Group, Inc.	BUY	19.26	Ordinary	6,064	6,064
12/11/2018	The Vanguard Group, Inc.	BUY	19.26	Ordinary	4,548	4,548
12/12/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	12,886	12,886
12/12/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	4,548	4,548
12/12/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	4,548	4,548
12/12/2018	The Vanguard Group, Inc.	SELL	19.33	Ordinary	(284)	(284)
12/12/2018	The Vanguard Group, Inc.	BUY	19.54	Ordinary	2,316	2,316
12/13/2018	The Vanguard Group, Inc.	BUY	19.30	Ordinary	455	455
12/13/2018	The Vanguard Group, Inc.	BUY	19.28	Ordinary	4,053	4,053
12/13/2018	The Vanguard Group, Inc.	BUY	19.28	Ordinary	800	800
12/14/2018	The Vanguard Group, Inc.	SELL	19.50	Ordinary	(450)	(450)
12/14/2018	The Vanguard Group, Inc.	BUY	19.73	Ordinary	394	394
12/14/2018	The Vanguard Group, Inc.	BUY	19.45	Ordinary	4,548	4,548
12/14/2018	The Vanguard Group, Inc.	BUY	19.45	Ordinary	1,737	1,737
12/17/2018	The Vanguard Group, Inc.	BUY	19.62	Ordinary	9,096	9,096
12/17/2018	The Vanguard Group, Inc.	BUY	19.62	Ordinary	5,790	5,790
12/19/2018	The Vanguard Group, Inc.	SELL	19.56	Ordinary	(44,224)	(44,224)
12/20/2018	The Vanguard Group, Inc.	BUY	20.07	Ordinary	5,062	5,062
12/20/2018	The Vanguard Group, Inc.	BUY	20.02	Ordinary	6,064	6,064
12/20/2018	The Vanguard Group, Inc.	SELL	20.07	Ordinary	(7,095)	(7,095)
12/20/2018	The Vanguard Group, Inc.	SELL	20.07	Ordinary	(24,664)	(24,664)
12/21/2018	The Vanguard Group, Inc.	BUY	20.00	Ordinary	2,226	2,226
12/21/2018	The Vanguard Group, Inc.	BUY	20.00	Ordinary	443	443
12/21/2018	The Vanguard Group, Inc.	SELL	19.99	Ordinary	(135)	(135)
12/21/2018	The Vanguard Group, Inc.	BUY	20.00	Ordinary	71	71
12/21/2018	The Vanguard Group, Inc.	BUY	20.00	Ordinary	785	785
12/21/2018	The Vanguard Group, Inc.	SELL	19.99	Ordinary	(12,581)	(12,581)
12/21/2018	The Vanguard Group, Inc.	BUY	20.00	Ordinary	5,490	5,490
12/21/2018	The Vanguard Group, Inc.	SELL	19.99	Ordinary	(314)	(314)
12/21/2018	The Vanguard Group, Inc.	SELL	19.99	Ordinary	(2,573)	(2,573)
12/21/2018	The Vanguard Group, Inc.	SELL	19.99	Ordinary	(6,943)	(6,943)
12/24/2018	The Vanguard Group, Inc.	BUY	19.63	Ordinary	5,220	5,220
12/24/2018	The Vanguard Group, Inc.	BUY	19.63	Ordinary	8,352	8,352
12/26/2018	The Vanguard Group, Inc.	BUY	19.86	Ordinary	3,132	3,132
12/27/2018	The Vanguard Group, Inc.	BUY	20.33	Ordinary	840	840

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
12/27/2018	The Vanguard Group, Inc.	BUY	20.33	Ordinary	1,566	1,566
12/27/2018	The Vanguard Group, Inc.	BUY	20.33	Ordinary	2,610	2,610
12/27/2018	The Vanguard Group, Inc.	BUY	20.33	Ordinary	7,830	7,830
12/28/2018	The Vanguard Group, Inc.	BUY	20.36	Ordinary	12,081	12,081
12/31/2018	The Vanguard Group, Inc.	BUY	20.62	Ordinary	4,032	4,032
1/2/2019	The Vanguard Group, Inc.	BUY	20.30	Ordinary	4,228	4,228
1/2/2019	The Vanguard Group, Inc.	BUY	20.35	Ordinary	1,176	1,176
1/2/2019	The Vanguard Group, Inc.	BUY	20.35	Ordinary	3,024	3,024
1/2/2019	The Vanguard Group, Inc.	BUY	20.64	Ordinary	770	770
1/2/2019	The Vanguard Group, Inc.	BUY	20.35	Ordinary	3,132	3,132
1/2/2019	The Vanguard Group, Inc.	BUY	20.35	Ordinary	3,654	3,654
1/2/2019	The Vanguard Group, Inc.	BUY	20.35	Ordinary	830	830
1/3/2019	The Vanguard Group, Inc.	BUY	20.46	Ordinary	14,076	14,076
1/3/2019	The Vanguard Group, Inc.	BUY	20.34	Ordinary	2,610	2,610
1/3/2019	The Vanguard Group, Inc.	BUY	20.34	Ordinary	830	830
1/4/2019	The Vanguard Group, Inc.	BUY	20.65	Ordinary	556	556
1/4/2019	The Vanguard Group, Inc.	BUY	20.59	Ordinary	35,067	35,067
1/4/2019	The Vanguard Group, Inc.	BUY	20.59	Ordinary	14,020	14,020
1/7/2019	The Vanguard Group, Inc.	BUY	20.70	Ordinary	1,044	1,044
1/8/2019	The Vanguard Group, Inc.	SELL	20.45	Ordinary	(328)	(328)
1/8/2019	The Vanguard Group, Inc.	SELL	20.78	Ordinary	(12,061)	(12,061)
1/9/2019	The Vanguard Group, Inc.	SELL	20.93	Ordinary	(7,989)	(7,989)
1/10/2019	The Vanguard Group, Inc.	BUY	21.02	Ordinary	3,378	3,378
1/10/2019	The Vanguard Group, Inc.	BUY	21.09	Ordinary	2,688	2,688
1/10/2019	The Vanguard Group, Inc.	BUY	21.09	Ordinary	1,660	1,660
1/10/2019	The Vanguard Group, Inc.	SELL	20.93	Ordinary	(7,694)	(7,694)
1/11/2019	The Vanguard Group, Inc.	BUY	21.18	Ordinary	1,008	1,008
1/15/2019	The Vanguard Group, Inc.	SELL	21.26	Ordinary	(6,640)	(6,640)
1/17/2019	The Vanguard Group, Inc.	BUY	20.70	Ordinary	561	561
1/17/2019	The Vanguard Group, Inc.	SELL	20.70	Ordinary	(5,146)	(5,146)
1/17/2019	The Vanguard Group, Inc.	SELL	20.76	Ordinary	(4,326)	(4,326)
1/18/2019	The Vanguard Group, Inc.	SELL	20.90	Ordinary	(1,647)	(1,647)
1/18/2019	The Vanguard Group, Inc.	SELL	20.63	Ordinary	(277)	(277)
1/22/2019	The Vanguard Group, Inc.	BUY	20.89	Ordinary	958	958
1/22/2019	The Vanguard Group, Inc.	BUY	20.89	Ordinary	146	146
1/22/2019	The Vanguard Group, Inc.	SELL	20.86	Ordinary	(4,326)	(4,326)
1/23/2019	The Vanguard Group, Inc.	BUY	21.06	Ordinary	627	627
1/23/2019	The Vanguard Group, Inc.	SELL	21.07	Ordinary	(9,373)	(9,373)
1/24/2019	The Vanguard Group, Inc.	BUY	21.44	Ordinary	9,610	9,610
1/24/2019	The Vanguard Group, Inc.	SELL	21.47	Ordinary	(9,373)	(9,373)
1/28/2019	The Vanguard Group, Inc.	SELL	21.62	Ordinary	(3,132)	(3,132)
1/29/2019	The Vanguard Group, Inc.	SELL	21.58	Ordinary	(5,768)	(5,768)
1/29/2019	The Vanguard Group, Inc.	SELL	21.58	Ordinary	(5,768)	(5,768)
1/29/2019	The Vanguard Group, Inc.	SELL	21.58	Ordinary	(13,699)	(13,699)
1/29/2019	The Vanguard Group, Inc.	SELL	21.38	Ordinary	(261)	(261)
1/29/2019	The Vanguard Group, Inc.	SELL	21.58	Ordinary	(2,088)	(2,088)
1/30/2019	The Vanguard Group, Inc.	BUY	21.63	Ordinary	18,099	18,099
1/30/2019	The Vanguard Group, Inc.	BUY	21.70	Ordinary	1,176	1,176
1/30/2019	The Vanguard Group, Inc.	SELL	21.70	Ordinary	(3,132)	(3,132)
1/31/2019	The Vanguard Group, Inc.	BUY	21.42	Ordinary	340	340
1/31/2019	The Vanguard Group, Inc.	BUY	21.42	Ordinary	553	553
1/31/2019	The Vanguard Group, Inc.	BUY	21.50	Ordinary	12,969	12,969
1/31/2019	The Vanguard Group, Inc.	SELL	21.50	Ordinary	(8,874)	(8,874)
2/5/2019	The Vanguard Group, Inc.	BUY	22.02	Ordinary	1,848	1,848
2/7/2019	The Vanguard Group, Inc.	SELL	21.11	Ordinary	(4,784)	(4,784)
2/7/2019	The Vanguard Group, Inc.	BUY	21.11	Ordinary	3,360	3,360
2/7/2019	The Vanguard Group, Inc.	SELL	21.11	Ordinary	(2,088)	(2,088)
2/7/2019	The Vanguard Group, Inc.	SELL	21.11	Ordinary	(2,088)	(2,088)
2/8/2019	The Vanguard Group, Inc.	BUY	21.35	Ordinary	8,274	8,274
2/8/2019	The Vanguard Group, Inc.	BUY	21.08	Ordinary	12,650	12,650
2/8/2019	The Vanguard Group, Inc.	SELL	21.38	Ordinary	(6,786)	(6,786)
2/11/2019	The Vanguard Group, Inc.	BUY	21.37	Ordinary	13,086	13,086
2/11/2019	The Vanguard Group, Inc.	SELL	21.36	Ordinary	(4,698)	(4,698)
2/12/2019	The Vanguard Group, Inc.	SELL	21.82	Ordinary	(34,097)	(34,097)
2/12/2019	The Vanguard Group, Inc.	BUY	21.83	Ordinary	49,982	49,982
2/13/2019	The Vanguard Group, Inc.	SELL	21.85	Ordinary	(3,132)	(3,132)
2/15/2019	The Vanguard Group, Inc.	SELL	22.05	Ordinary	(402)	(402)
2/15/2019	The Vanguard Group, Inc.	SELL	21.63	Ordinary	(189)	(189)
2/18/2019	The Vanguard Group, Inc.	BUY	22.04	Ordinary	2,321	2,321

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2/20/2019	The Vanguard Group, Inc.	BUY	21.31	Ordinary	11,222	11,222
2/20/2019	The Vanguard Group, Inc.	SELL	21.31	Ordinary	(6,353)	(6,353)
2/21/2019	The Vanguard Group, Inc.	SELL	21.39	Ordinary	(2,610)	(2,610)
2/22/2019	The Vanguard Group, Inc.	BUY	21.65	Ordinary	35,446	35,446
2/22/2019	The Vanguard Group, Inc.	BUY	21.65	Ordinary	13,097	13,097
2/26/2019	The Vanguard Group, Inc.	BUY	21.32	Ordinary	3,605	3,605
2/27/2019	The Vanguard Group, Inc.	BUY	21.31	Ordinary	340	340
2/27/2019	The Vanguard Group, Inc.	BUY	21.32	Ordinary	830	830
2/28/2019	The Vanguard Group, Inc.	SELL	21.21	Ordinary	(11,966)	(11,966)
3/1/2019	The Vanguard Group, Inc.	SELL	21.38	Ordinary	(2,554)	(2,554)
3/1/2019	The Vanguard Group, Inc.	BUY	21.38	Ordinary	553	553
3/1/2019	The Vanguard Group, Inc.	SELL	21.38	Ordinary	(13,693)	(13,693)
3/4/2019	The Vanguard Group, Inc.	SELL	21.15	Ordinary	(1,655)	(1,655)
3/4/2019	The Vanguard Group, Inc.	BUY	21.15	Ordinary	1,145	1,145
3/4/2019	The Vanguard Group, Inc.	BUY	21.15	Ordinary	13,254	13,254
3/4/2019	The Vanguard Group, Inc.	SELL	21.15	Ordinary	(13,079)	(13,079)
3/5/2019	The Vanguard Group, Inc.	SELL	21.45	Ordinary	(3,183)	(3,183)
3/5/2019	The Vanguard Group, Inc.	BUY	21.43	Ordinary	908	908
3/5/2019	The Vanguard Group, Inc.	BUY	21.34	Ordinary	46,037	46,037
3/5/2019	The Vanguard Group, Inc.	BUY	21.44	Ordinary	4,326	4,326
3/6/2019	The Vanguard Group, Inc.	BUY	21.63	Ordinary	465	465
3/8/2019	The Vanguard Group, Inc.	BUY	22.07	Ordinary	355	355
3/8/2019	The Vanguard Group, Inc.	BUY	21.92	Ordinary	3,605	3,605
3/11/2019	The Vanguard Group, Inc.	BUY	21.84	Ordinary	340	340
3/12/2019	The Vanguard Group, Inc.	SELL	21.83	Ordinary	(2,169)	(2,169)
3/14/2019	The Vanguard Group, Inc.	BUY	21.78	Ordinary	170	170
3/14/2019	The Vanguard Group, Inc.	SELL	21.78	Ordinary	(7,629)	(7,629)
3/15/2019	The Vanguard Group, Inc.	SELL	22.08	Ordinary	(1,279)	(1,279)
3/15/2019	The Vanguard Group, Inc.	SELL	22.08	Ordinary	(1,208)	(1,208)
3/18/2019	The Vanguard Group, Inc.	BUY	21.86	Ordinary	2,352	2,352
3/19/2019	The Vanguard Group, Inc.	BUY	21.93	Ordinary	4,626	4,626
3/19/2019	The Vanguard Group, Inc.	BUY	21.93	Ordinary	178	178
3/20/2019	The Vanguard Group, Inc.	BUY	22.12	Ordinary	32,116	32,116
3/20/2019	The Vanguard Group, Inc.	BUY	22.12	Ordinary	2,163	2,163
3/21/2019	The Vanguard Group, Inc.	BUY	21.95	Ordinary	355	355
3/25/2019	The Vanguard Group, Inc.	SELL	21.88	Ordinary	(13,688)	(13,688)
3/26/2019	The Vanguard Group, Inc.	BUY	21.92	Ordinary	32,361	32,361
3/27/2019	The Vanguard Group, Inc.	SELL	21.78	Ordinary	(356)	(356)
3/27/2019	The Vanguard Group, Inc.	BUY	21.59	Ordinary	848	848
3/28/2019	The Vanguard Group, Inc.	SELL	21.96	Ordinary	(1,934)	(1,934)
3/29/2019	The Vanguard Group, Inc.	BUY	21.77	Ordinary	340	340
3/29/2019	The Vanguard Group, Inc.	SELL	21.77	Ordinary	(8,858)	(8,858)
3/29/2019	The Vanguard Group, Inc.	BUY	21.77	Ordinary	32,213	32,213
4/1/2019	The Vanguard Group, Inc.	BUY	21.61	Ordinary	889	889
4/1/2019	The Vanguard Group, Inc.	BUY	21.63	Ordinary	2,172	2,172
4/1/2019	The Vanguard Group, Inc.	BUY	21.63	Ordinary	848	848
4/3/2019	The Vanguard Group, Inc.	BUY	21.76	Ordinary	32,526	32,526
4/4/2019	The Vanguard Group, Inc.	BUY	21.86	Ordinary	1,293	1,293
4/4/2019	The Vanguard Group, Inc.	SELL	21.86	Ordinary	(5,009)	(5,009)
4/5/2019	The Vanguard Group, Inc.	BUY	21.54	Ordinary	3,360	3,360
4/5/2019	The Vanguard Group, Inc.	BUY	21.54	Ordinary	848	848
4/8/2019	The Vanguard Group, Inc.	BUY	21.70	Ordinary	848	848
4/9/2019	The Vanguard Group, Inc.	SELL	21.61	Ordinary	(3,892)	(3,892)
4/10/2019	The Vanguard Group, Inc.	BUY	21.51	Ordinary	15,752	15,752
4/12/2019	The Vanguard Group, Inc.	BUY	21.99	Ordinary	13,016	13,016
4/16/2019	The Vanguard Group, Inc.	BUY	21.96	Ordinary	340	340
4/16/2019	The Vanguard Group, Inc.	BUY	21.96	Ordinary	32,919	32,919
4/17/2019	The Vanguard Group, Inc.	BUY	21.88	Ordinary	31,864	31,864
4/18/2019	The Vanguard Group, Inc.	BUY	21.79	Ordinary	8,478	8,478
4/23/2019	The Vanguard Group, Inc.	SELL	22.18	Ordinary	(3,284)	(3,284)
4/23/2019	The Vanguard Group, Inc.	BUY	22.23	Ordinary	3,024	3,024
4/24/2019	The Vanguard Group, Inc.	BUY	22.44	Ordinary	592	592
4/26/2019	The Vanguard Group, Inc.	BUY	22.96	Ordinary	2,715	2,715
4/26/2019	The Vanguard Group, Inc.	SELL	22.91	Ordinary	(254)	(254)
5/3/2019	The Vanguard Group, Inc.	BUY	21.99	Ordinary	1,293	1,293
5/3/2019	The Vanguard Group, Inc.	BUY	21.98	Ordinary	664	664
5/6/2019	The Vanguard Group, Inc.	SELL	22.14	Ordinary	(3,588)	(3,588)
5/7/2019	The Vanguard Group, Inc.	BUY	22.30	Ordinary	1,293	1,293
5/7/2019	The Vanguard Group, Inc.	BUY	22.30	Ordinary	1,622	1,622



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5/7/2019	The Vanguard Group, Inc.	BUY	22.30	Ordinary	43,047	43,047
5/7/2019	The Vanguard Group, Inc.	BUY	22.33	Ordinary	1,500	1,500
5/8/2019	The Vanguard Group, Inc.	BUY	21.99	Ordinary	355	355
5/8/2019	The Vanguard Group, Inc.	BUY	21.99	Ordinary	5,045	5,045
5/8/2019	The Vanguard Group, Inc.	SELL	21.99	Ordinary	(3,588)	(3,588)
5/8/2019	The Vanguard Group, Inc.	BUY	22.09	Ordinary	16,066	16,066
5/9/2019	The Vanguard Group, Inc.	BUY	22.48	Ordinary	841	841
5/9/2019	The Vanguard Group, Inc.	BUY	22.21	Ordinary	37,345	37,345
5/9/2019	The Vanguard Group, Inc.	BUY	22.46	Ordinary	3,258	3,258
5/9/2019	The Vanguard Group, Inc.	BUY	22.46	Ordinary	872	872
5/10/2019	The Vanguard Group, Inc.	BUY	22.96	Ordinary	355	355
5/10/2019	The Vanguard Group, Inc.	SELL	22.96	Ordinary	(10,998)	(10,998)
5/10/2019	The Vanguard Group, Inc.	BUY	22.96	Ordinary	655	655
5/13/2019	The Vanguard Group, Inc.	BUY	22.60	Ordinary	4,798	4,798
5/14/2019	The Vanguard Group, Inc.	BUY	22.43	Ordinary	340	340
5/14/2019	The Vanguard Group, Inc.	BUY	22.60	Ordinary	15,525	15,525
5/14/2019	The Vanguard Group, Inc.	SELL	22.51	Ordinary	(3,588)	(3,588)
5/14/2019	The Vanguard Group, Inc.	BUY	22.51	Ordinary	2,088	2,088
5/14/2019	The Vanguard Group, Inc.	BUY	22.51	Ordinary	436	436
5/15/2019	The Vanguard Group, Inc.	BUY	22.59	Ordinary	8,649	8,649
5/15/2019	The Vanguard Group, Inc.	BUY	22.55	Ordinary	156,971	156,971
5/16/2019	The Vanguard Group, Inc.	BUY	22.43	Ordinary	102,110	102,110
5/17/2019	The Vanguard Group, Inc.	BUY	22.59	Ordinary	614	614
5/17/2019	The Vanguard Group, Inc.	BUY	22.59	Ordinary	32,161	32,161
5/20/2019	The Vanguard Group, Inc.	BUY	22.27	Ordinary	1,500	1,500
5/21/2019	The Vanguard Group, Inc.	BUY	22.09	Ordinary	3,056	3,056
5/21/2019	The Vanguard Group, Inc.	BUY	22.10	Ordinary	15,303	15,303
5/22/2019	The Vanguard Group, Inc.	BUY	22.17	Ordinary	3,056	3,056
5/22/2019	The Vanguard Group, Inc.	BUY	22.21	Ordinary	41,890	41,890
5/24/2019	The Vanguard Group, Inc.	BUY	21.73	Ordinary	1,139	1,139
5/28/2019	The Vanguard Group, Inc.	BUY	20.94	Ordinary	2,976	2,976
5/28/2019	The Vanguard Group, Inc.	BUY	20.89	Ordinary	2,715	2,715
5/28/2019	The Vanguard Group, Inc.	SELL	20.94	Ordinary	(19,155)	(19,155)
5/29/2019	The Vanguard Group, Inc.	SELL	20.63	Ordinary	(456)	(456)
5/29/2019	The Vanguard Group, Inc.	BUY	20.63	Ordinary	1,228	1,228
5/30/2019	The Vanguard Group, Inc.	BUY	20.67	Ordinary	355	355
5/31/2019	The Vanguard Group, Inc.	SELL	20.55	Ordinary	(18,144)	(18,144)
6/3/2019	The Vanguard Group, Inc.	BUY	20.21	Ordinary	1,500	1,500
6/4/2019	The Vanguard Group, Inc.	BUY	20.31	Ordinary	5,086	5,086
6/5/2019	The Vanguard Group, Inc.	SELL	20.27	Ordinary	(1,293)	(1,293)
6/5/2019	The Vanguard Group, Inc.	SELL	20.34	Ordinary	(2,392)	(2,392)
6/5/2019	The Vanguard Group, Inc.	SELL	20.34	Ordinary	(4,784)	(4,784)
6/5/2019	The Vanguard Group, Inc.	SELL	20.58	Ordinary	(284)	(284)
6/6/2019	The Vanguard Group, Inc.	BUY	20.65	Ordinary	340	340
6/6/2019	The Vanguard Group, Inc.	SELL	20.65	Ordinary	(20,519)	(20,519)
6/6/2019	The Vanguard Group, Inc.	BUY	20.69	Ordinary	872	872
6/7/2019	The Vanguard Group, Inc.	BUY	20.91	Ordinary	30,517	30,517
6/7/2019	The Vanguard Group, Inc.	BUY	20.91	Ordinary	173	173
6/7/2019	The Vanguard Group, Inc.	BUY	20.93	Ordinary	872	872
6/10/2019	The Vanguard Group, Inc.	BUY	21.00	Ordinary	1,800	1,800
6/11/2019	The Vanguard Group, Inc.	BUY	19.40	Ordinary	355	355
6/11/2019	The Vanguard Group, Inc.	BUY	19.40	Ordinary	592	592
6/11/2019	The Vanguard Group, Inc.	SELL	19.37	Ordinary	(2,990)	(2,990)
6/12/2019	The Vanguard Group, Inc.	SELL	19.55	Ordinary	(18,776)	(18,776)
6/12/2019	The Vanguard Group, Inc.	BUY	19.55	Ordinary	445	445
6/12/2019	The Vanguard Group, Inc.	BUY	19.58	Ordinary	1,800	1,800
6/13/2019	The Vanguard Group, Inc.	BUY	19.57	Ordinary	600	600
6/13/2019	The Vanguard Group, Inc.	SELL	19.53	Ordinary	(13,824)	(13,824)
6/14/2019	The Vanguard Group, Inc.	SELL	19.57	Ordinary	(1,217)	(1,217)
6/14/2019	The Vanguard Group, Inc.	SELL	19.60	Ordinary	(1,794)	(1,794)
6/14/2019	The Vanguard Group, Inc.	SELL	19.57	Ordinary	(18,630)	(18,630)
6/17/2019	The Vanguard Group, Inc.	BUY	19.88	Ordinary	340	340
6/17/2019	The Vanguard Group, Inc.	SELL	19.88	Ordinary	(5,409)	(5,409)
6/18/2019	The Vanguard Group, Inc.	SELL	19.99	Ordinary	(1,953)	(1,953)
6/18/2019	The Vanguard Group, Inc.	BUY	19.91	Ordinary	872	872
6/19/2019	The Vanguard Group, Inc.	BUY	19.75	Ordinary	10,331	10,331
6/20/2019	The Vanguard Group, Inc.	BUY	20.49	Ordinary	1,500	1,500
6/21/2019	The Vanguard Group, Inc.	SELL	20.39	Ordinary	(423)	(423)
6/21/2019	The Vanguard Group, Inc.	SELL	20.39	Ordinary	(264)	(264)

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6/21/2019	The Vanguard Group, Inc.	BUY	20.39	Ordinary	1,162	1,162
6/21/2019	The Vanguard Group, Inc.	BUY	20.39	Ordinary	4,127	4,127
6/21/2019	The Vanguard Group, Inc.	SELL	20.39	Ordinary	(40,480)	(40,480)
6/21/2019	The Vanguard Group, Inc.	SELL	20.39	Ordinary	(64,870)	(64,870)
6/21/2019	The Vanguard Group, Inc.	BUY	20.41	Ordinary	750	750
6/24/2019	The Vanguard Group, Inc.	BUY	20.36	Ordinary	4,176	4,176
6/25/2019	The Vanguard Group, Inc.	BUY	20.15	Ordinary	1,418	1,418
6/25/2019	The Vanguard Group, Inc.	SELL	20.12	Ordinary	(1,794)	(1,794)
6/25/2019	The Vanguard Group, Inc.	SELL	20.12	Ordinary	(1,794)	(1,794)
6/25/2019	The Vanguard Group, Inc.	BUY	20.12	Ordinary	1,794	1,794
6/25/2019	The Vanguard Group, Inc.	BUY	20.12	Ordinary	900	900
6/25/2019	The Vanguard Group, Inc.	BUY	20.12	Ordinary	1,350	1,350
6/26/2019	The Vanguard Group, Inc.	BUY	20.14	Ordinary	1,293	1,293
6/26/2019	The Vanguard Group, Inc.	BUY	20.14	Ordinary	1,682	1,682
6/26/2019	The Vanguard Group, Inc.	BUY	20.07	Ordinary	1,800	1,800
6/26/2019	The Vanguard Group, Inc.	BUY	20.07	Ordinary	1,050	1,050
6/26/2019	The Vanguard Group, Inc.	SELL	20.08	Ordinary	(134,220)	(134,220)
6/27/2019	The Vanguard Group, Inc.	SELL	20.12	Ordinary	(277)	(277)
7/1/2019	The Vanguard Group, Inc.	BUY	20.13	Ordinary	2,811	2,811
7/2/2019	The Vanguard Group, Inc.	BUY	20.44	Ordinary	12,217	12,217
7/2/2019	The Vanguard Group, Inc.	BUY	20.46	Ordinary	1,350	1,350
7/3/2019	The Vanguard Group, Inc.	BUY	20.61	Ordinary	7,414	7,414
7/4/2019	The Vanguard Group, Inc.	BUY	20.98	Ordinary	5,862	5,862
7/5/2019	The Vanguard Group, Inc.	BUY	21.15	Ordinary	2,248	2,248
7/9/2019	The Vanguard Group, Inc.	BUY	20.28	Ordinary	340	340
7/9/2019	The Vanguard Group, Inc.	BUY	20.32	Ordinary	1,500	1,500
7/10/2019	The Vanguard Group, Inc.	BUY	20.46	Ordinary	1,943	1,943
7/10/2019	The Vanguard Group, Inc.	BUY	20.41	Ordinary	35,368	35,368
7/10/2019	The Vanguard Group, Inc.	BUY	20.41	Ordinary	18,538	18,538
7/12/2019	The Vanguard Group, Inc.	SELL	20.60	Ordinary	(9,978)	(9,978)
7/12/2019	The Vanguard Group, Inc.	BUY	20.51	Ordinary	1,181	1,181
7/15/2019	The Vanguard Group, Inc.	BUY	20.22	Ordinary	3,372	3,372
7/15/2019	The Vanguard Group, Inc.	SELL	20.22	Ordinary	(5,820)	(5,820)
7/17/2019	The Vanguard Group, Inc.	BUY	20.61	Ordinary	34,748	34,748
7/17/2019	The Vanguard Group, Inc.	BUY	20.54	Ordinary	1,050	1,050
7/17/2019	The Vanguard Group, Inc.	BUY	20.54	Ordinary	750	750
7/17/2019	The Vanguard Group, Inc.	BUY	20.54	Ordinary	1,500	1,500
7/18/2019	The Vanguard Group, Inc.	BUY	20.22	Ordinary	1,235	1,235
7/19/2019	The Vanguard Group, Inc.	BUY	20.67	Ordinary	882	882
7/22/2019	The Vanguard Group, Inc.	SELL	20.70	Ordinary	(11,552)	(11,552)
7/22/2019	The Vanguard Group, Inc.	BUY	20.72	Ordinary	1,500	1,500
7/22/2019	The Vanguard Group, Inc.	BUY	20.72	Ordinary	2,810	2,810
7/22/2019	The Vanguard Group, Inc.	BUY	20.72	Ordinary	2,810	2,810
7/22/2019	The Vanguard Group, Inc.	BUY	20.72	Ordinary	882	882
7/23/2019	The Vanguard Group, Inc.	BUY	20.69	Ordinary	355	355
7/23/2019	The Vanguard Group, Inc.	BUY	20.72	Ordinary	1,500	1,500
7/25/2019	The Vanguard Group, Inc.	BUY	21.02	Ordinary	1,566	1,566
7/26/2019	The Vanguard Group, Inc.	SELL	20.91	Ordinary	(2,551)	(2,551)
7/26/2019	The Vanguard Group, Inc.	BUY	20.91	Ordinary	166	166
7/26/2019	The Vanguard Group, Inc.	BUY	20.98	Ordinary	1,350	1,350
7/26/2019	The Vanguard Group, Inc.	BUY	20.98	Ordinary	2,610	2,610
7/26/2019	The Vanguard Group, Inc.	BUY	20.98	Ordinary	882	882
7/29/2019	The Vanguard Group, Inc.	SELL	20.98	Ordinary	(14,240)	(14,240)
7/30/2019	The Vanguard Group, Inc.	BUY	21.23	Ordinary	1,293	1,293
7/30/2019	The Vanguard Group, Inc.	BUY	21.21	Ordinary	8,478	8,478
7/30/2019	The Vanguard Group, Inc.	SELL	21.19	Ordinary	(2,392)	(2,392)
7/31/2019	The Vanguard Group, Inc.	BUY	20.96	Ordinary	1,350	1,350
8/1/2019	The Vanguard Group, Inc.	SELL	20.44	Ordinary	(24,608)	(24,608)
8/1/2019	The Vanguard Group, Inc.	BUY	20.69	Ordinary	40,199	40,199
8/1/2019	The Vanguard Group, Inc.	BUY	20.48	Ordinary	5,400	5,400
8/2/2019	The Vanguard Group, Inc.	BUY	20.52	Ordinary	35,496	35,496
8/2/2019	The Vanguard Group, Inc.	BUY	20.43	Ordinary	2,088	2,088
8/5/2019	The Vanguard Group, Inc.	BUY	20.18	Ordinary	710	710
8/5/2019	The Vanguard Group, Inc.	BUY	20.06	Ordinary	1,500	1,500
8/5/2019	The Vanguard Group, Inc.	BUY	20.06	Ordinary	2,610	2,610
8/6/2019	The Vanguard Group, Inc.	BUY	19.81	Ordinary	9,369	9,369
8/6/2019	The Vanguard Group, Inc.	BUY	19.92	Ordinary	441	441
8/7/2019	The Vanguard Group, Inc.	SELL	19.72	Ordinary	(487)	(487)
8/7/2019	The Vanguard Group, Inc.	SELL	19.83	Ordinary	(91,621)	(91,621)

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8/8/2019	The Vanguard Group, Inc.	BUY	19.08	Ordinary	976	976
8/8/2019	The Vanguard Group, Inc.	SELL	19.14	Ordinary	(2,990)	(2,990)
8/8/2019	The Vanguard Group, Inc.	BUY	19.20	Ordinary	38,368	38,368
8/9/2019	The Vanguard Group, Inc.	BUY	19.27	Ordinary	1,323	1,323
8/12/2019	The Vanguard Group, Inc.	BUY	19.02	Ordinary	355	355
8/12/2019	The Vanguard Group, Inc.	BUY	19.18	Ordinary	1,560	1,560
8/12/2019	The Vanguard Group, Inc.	BUY	18.97	Ordinary	2,400	2,400
8/13/2019	The Vanguard Group, Inc.	BUY	18.88	Ordinary	719	719
8/13/2019	The Vanguard Group, Inc.	SELL	18.93	Ordinary	(4,186)	(4,186)
8/13/2019	The Vanguard Group, Inc.	BUY	18.93	Ordinary	882	882
8/14/2019	The Vanguard Group, Inc.	BUY	19.07	Ordinary	340	340
8/14/2019	The Vanguard Group, Inc.	BUY	18.98	Ordinary	17,155	17,155
8/15/2019	The Vanguard Group, Inc.	BUY	18.80	Ordinary	60	60
8/15/2019	The Vanguard Group, Inc.	SELL	18.78	Ordinary	(3,588)	(3,588)
8/15/2019	The Vanguard Group, Inc.	BUY	18.80	Ordinary	42,913	42,913
8/19/2019	The Vanguard Group, Inc.	BUY	18.92	Ordinary	7,033	7,033
8/19/2019	The Vanguard Group, Inc.	SELL	18.92	Ordinary	(503)	(503)
8/20/2019	The Vanguard Group, Inc.	SELL	18.88	Ordinary	(2,011)	(2,011)
8/22/2019	The Vanguard Group, Inc.	BUY	18.60	Ordinary	3,000	3,000
8/22/2019	The Vanguard Group, Inc.	SELL	18.56	Ordinary	(14,906)	(14,906)
8/27/2019	The Vanguard Group, Inc.	SELL	18.69	Ordinary	(2,804)	(2,804)
8/29/2019	The Vanguard Group, Inc.	BUY	18.92	Ordinary	9,217	9,217
8/30/2019	The Vanguard Group, Inc.	BUY	18.96	Ordinary	47,323	47,323
9/2/2019	The Vanguard Group, Inc.	BUY	19.08	Ordinary	6,589	6,589
9/6/2019	The Vanguard Group, Inc.	BUY	18.90	Ordinary	340	340
9/6/2019	The Vanguard Group, Inc.	BUY	18.90	Ordinary	1,163	1,163
9/9/2019	The Vanguard Group, Inc.	BUY	18.93	Ordinary	1,950	1,950
9/10/2019	The Vanguard Group, Inc.	SELL	18.95	Ordinary	(249)	(249)
9/11/2019	The Vanguard Group, Inc.	BUY	19.06	Ordinary	1,950	1,950
9/12/2019	The Vanguard Group, Inc.	BUY	18.99	Ordinary	1,500	1,500
9/16/2019	The Vanguard Group, Inc.	BUY	18.87	Ordinary	3,615	3,615
9/16/2019	The Vanguard Group, Inc.	BUY	18.90	Ordinary	1,794	1,794
9/17/2019	The Vanguard Group, Inc.	BUY	18.98	Ordinary	350	350
9/18/2019	The Vanguard Group, Inc.	BUY	18.82	Ordinary	1,350	1,350
9/20/2019	The Vanguard Group, Inc.	SELL	18.88	Ordinary	(1,211)	(1,211)
9/20/2019	The Vanguard Group, Inc.	SELL	18.88	Ordinary	(62,236)	(62,236)
9/20/2019	The Vanguard Group, Inc.	SELL	18.88	Ordinary	(9,365)	(9,365)
9/20/2019	The Vanguard Group, Inc.	SELL	18.88	Ordinary	(1,659)	(1,659)
9/23/2019	The Vanguard Group, Inc.	BUY	18.94	Ordinary	1,500	1,500
9/24/2019	The Vanguard Group, Inc.	BUY	18.86	Ordinary	9,943	9,943
9/24/2019	The Vanguard Group, Inc.	SELL	18.86	Ordinary	(438)	(438)
9/25/2019	The Vanguard Group, Inc.	BUY	19.13	Ordinary	9,776	9,776
9/25/2019	The Vanguard Group, Inc.	BUY	19.17	Ordinary	1,500	1,500
9/27/2019	The Vanguard Group, Inc.	SELL	19.09	Ordinary	(515)	(515)
9/30/2019	The Vanguard Group, Inc.	BUY	19.17	Ordinary	874	874
10/1/2019	The Vanguard Group, Inc.	BUY	19.48	Ordinary	1,273	1,273
10/1/2019	The Vanguard Group, Inc.	BUY	19.48	Ordinary	39	39
10/2/2019	The Vanguard Group, Inc.	BUY	19.04	Ordinary	437	437
10/4/2019	The Vanguard Group, Inc.	BUY	19.02	Ordinary	245	245
10/10/2019	The Vanguard Group, Inc.	BUY	19.11	Ordinary	4,500	4,500
10/10/2019	The Vanguard Group, Inc.	BUY	19.11	Ordinary	1,500	1,500
10/15/2019	The Vanguard Group, Inc.	BUY	19.36	Ordinary	1,200	1,200
10/16/2019	The Vanguard Group, Inc.	BUY	19.45	Ordinary	278	278
10/16/2019	The Vanguard Group, Inc.	BUY	19.42	Ordinary	872	872
10/21/2019	The Vanguard Group, Inc.	BUY	19.29	Ordinary	340	340
10/21/2019	The Vanguard Group, Inc.	BUY	19.30	Ordinary	872	872
10/23/2019	The Vanguard Group, Inc.	BUY	19.62	Ordinary	1,500	1,500
10/23/2019	The Vanguard Group, Inc.	SELL	19.57	Ordinary	(7,276)	(7,276)
10/25/2019	The Vanguard Group, Inc.	BUY	19.71	Ordinary	340	340
10/25/2019	The Vanguard Group, Inc.	BUY	19.71	Ordinary	7,498	7,498
10/25/2019	The Vanguard Group, Inc.	SELL	19.71	Ordinary	(17)	(17)
10/25/2019	The Vanguard Group, Inc.	SELL	19.70	Ordinary	(7,344)	(7,344)
10/25/2019	The Vanguard Group, Inc.	BUY	19.70	Ordinary	872	872
10/28/2019	The Vanguard Group, Inc.	BUY	19.71	Ordinary	20,328	20,328
10/29/2019	The Vanguard Group, Inc.	SELL	19.72	Ordinary	(9,248)	(9,248)
10/30/2019	The Vanguard Group, Inc.	BUY	19.60	Ordinary	14,839	14,839
10/31/2019	The Vanguard Group, Inc.	SELL	19.78	Ordinary	(10,802)	(10,802)
11/1/2019	The Vanguard Group, Inc.	BUY	19.88	Ordinary	236	236
11/4/2019	The Vanguard Group, Inc.	BUY	19.73	Ordinary	1,713	1,713

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11/4/2019	The Vanguard Group, Inc.	SELL	19.73	Ordinary	(7,143)	(7,143)
11/5/2019	The Vanguard Group, Inc.	BUY	19.63	Ordinary	3,000	3,000
11/5/2019	The Vanguard Group, Inc.	SELL	19.64	Ordinary	(587)	(587)
11/6/2019	The Vanguard Group, Inc.	BUY	19.56	Ordinary	2,247	2,247
11/6/2019	The Vanguard Group, Inc.	BUY	19.64	Ordinary	1,500	1,500
11/8/2019	The Vanguard Group, Inc.	BUY	19.92	Ordinary	340	340
11/11/2019	The Vanguard Group, Inc.	BUY	20.12	Ordinary	2,100	2,100
11/13/2019	The Vanguard Group, Inc.	BUY	19.98	Ordinary	154	154
11/15/2019	The Vanguard Group, Inc.	BUY	20.13	Ordinary	1,200	1,200
11/15/2019	The Vanguard Group, Inc.	BUY	20.04	Ordinary	5,527	5,527
11/18/2019	The Vanguard Group, Inc.	BUY	20.01	Ordinary	930	930
11/18/2019	The Vanguard Group, Inc.	BUY	19.99	Ordinary	1,650	1,650
11/18/2019	The Vanguard Group, Inc.	BUY	19.99	Ordinary	1,308	1,308
11/19/2019	The Vanguard Group, Inc.	BUY	20.25	Ordinary	340	340
11/20/2019	The Vanguard Group, Inc.	BUY	19.98	Ordinary	1,100	1,100
11/21/2019	The Vanguard Group, Inc.	BUY	19.81	Ordinary	148	148
11/22/2019	The Vanguard Group, Inc.	BUY	19.89	Ordinary	620	620
11/22/2019	The Vanguard Group, Inc.	BUY	19.89	Ordinary	2,400	2,400
11/22/2019	The Vanguard Group, Inc.	SELL	19.77	Ordinary	(193)	(193)
6/13/2018	Vanguard Investments Australia Ltd.	BUY	21.44	Ordinary	219,192	219,192
6/14/2018	Vanguard Investments Australia Ltd.	BUY	21.45	Ordinary	226,386	226,386
6/14/2018	Vanguard Investments Australia Ltd.	BUY	21.44	Ordinary	6,040	6,040
6/15/2018	Vanguard Investments Australia Ltd.	BUY	21.64	Ordinary	5,599	5,599
6/15/2018	Vanguard Investments Australia Ltd.	BUY	21.66	Ordinary	31,589	31,589
6/15/2018	Vanguard Investments Australia Ltd.	BUY	21.64	Ordinary	87,699	87,699
6/15/2018	Vanguard Investments Australia Ltd.	BUY	21.69	Ordinary	428,288	428,288
6/15/2018	Vanguard Investments Australia Ltd.	BUY	21.64	Ordinary	3,496	3,496
6/15/2018	Vanguard Investments Australia Ltd.	BUY	21.66	Ordinary	19,727	19,727
6/18/2018	Vanguard Investments Australia Ltd.	BUY	21.74	Ordinary	185,321	185,321
6/19/2018	Vanguard Investments Australia Ltd.	BUY	21.81	Ordinary	130,597	130,597
6/20/2018	Vanguard Investments Australia Ltd.	BUY	21.85	Ordinary	210,784	210,784
6/21/2018	Vanguard Investments Australia Ltd.	BUY	21.89	Ordinary	13,435	13,435
6/21/2018	Vanguard Investments Australia Ltd.	BUY	21.89	Ordinary	114,056	114,056
6/26/2018	Vanguard Investments Australia Ltd.	SELL	21.84	Ordinary	(730)	(730)
6/26/2018	Vanguard Investments Australia Ltd.	SELL	21.84	Ordinary	(719)	(719)
6/29/2018	Vanguard Investments Australia Ltd.	SELL	22.48	Ordinary	(23,878)	(23,878)
6/29/2018	Vanguard Investments Australia Ltd.	SELL	22.48	Ordinary	(41,536)	(41,536)
7/3/2018	Vanguard Investments Australia Ltd.	BUY	22.69	Ordinary	23,497	23,497
7/5/2018	Vanguard Investments Australia Ltd.	BUY	23.02	Ordinary	23,554	23,554
7/5/2018	Vanguard Investments Australia Ltd.	SELL	23.03	Ordinary	(1,913)	(1,913)
7/5/2018	Vanguard Investments Australia Ltd.	BUY	23.02	Ordinary	1,749	1,749
7/6/2018	Vanguard Investments Australia Ltd.	BUY	23.11	Ordinary	3,292	3,292
7/6/2018	Vanguard Investments Australia Ltd.	BUY	23.11	Ordinary	9,917	9,917
7/6/2018	Vanguard Investments Australia Ltd.	BUY	23.11	Ordinary	11,748	11,748
7/6/2018	Vanguard Investments Australia Ltd.	BUY	23.15	Ordinary	5,445	5,445
7/9/2018	Vanguard Investments Australia Ltd.	SELL	23.07	Ordinary	(4,853)	(4,853)
7/16/2018	Vanguard Investments Australia Ltd.	BUY	21.75	Ordinary	3,630	3,630
7/16/2018	Vanguard Investments Australia Ltd.	BUY	21.75	Ordinary	9,583	9,583
7/17/2018	Vanguard Investments Australia Ltd.	BUY	21.43	Ordinary	7,518	7,518
7/18/2018	Vanguard Investments Australia Ltd.	SELL	21.56	Ordinary	(6,418)	(6,418)
7/19/2018	Vanguard Investments Australia Ltd.	BUY	21.48	Ordinary	7,589	7,589
7/20/2018	Vanguard Investments Australia Ltd.	BUY	21.78	Ordinary	6,534	6,534
7/27/2018	Vanguard Investments Australia Ltd.	BUY	21.78	Ordinary	10,584	10,584
8/2/2018	Vanguard Investments Australia Ltd.	BUY	21.89	Ordinary	5,346	5,346
8/3/2018	Vanguard Investments Australia Ltd.	SELL	21.83	Ordinary	(6,331)	(6,331)
8/3/2018	Vanguard Investments Australia Ltd.	BUY	21.83	Ordinary	8,555	8,555
8/7/2018	Vanguard Investments Australia Ltd.	BUY	22.09	Ordinary	10,739	10,739
8/15/2018	Vanguard Investments Australia Ltd.	BUY	21.65	Ordinary	3,714	3,714
8/15/2018	Vanguard Investments Australia Ltd.	BUY	21.65	Ordinary	10,158	10,158
8/20/2018	Vanguard Investments Australia Ltd.	SELL	21.82	Ordinary	(5,280)	(5,280)
8/21/2018	Vanguard Investments Australia Ltd.	BUY	21.36	Ordinary	6,110	6,110
8/27/2018	Vanguard Investments Australia Ltd.	BUY	20.56	Ordinary	12,247	12,247
8/29/2018	Vanguard Investments Australia Ltd.	BUY	20.65	Ordinary	8,828	8,828
9/3/2018	Vanguard Investments Australia Ltd.	SELL	20.75	Ordinary	(11,731)	(11,731)
9/4/2018	Vanguard Investments Australia Ltd.	BUY	20.50	Ordinary	6,501	6,501
9/4/2018	Vanguard Investments Australia Ltd.	BUY	20.50	Ordinary	12,346	12,346
9/6/2018	Vanguard Investments Australia Ltd.	BUY	20.03	Ordinary	11,638	11,638
9/7/2018	Vanguard Investments Australia Ltd.	BUY	19.64	Ordinary	18,810	18,810
9/10/2018	Vanguard Investments Australia Ltd.	BUY	19.71	Ordinary	5,720	5,720

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9/11/2018	Vanguard Investments Australia Ltd.	SELL	19.70	Ordinary	(7,144)	(7,144)
9/17/2018	Vanguard Investments Australia Ltd.	BUY	19.36	Ordinary	6,182	6,182
9/18/2018	Vanguard Investments Australia Ltd.	BUY	19.37	Ordinary	5,285	5,285
9/18/2018	Vanguard Investments Australia Ltd.	BUY	19.37	Ordinary	8,318	8,318
9/18/2018	Vanguard Investments Australia Ltd.	BUY	19.37	Ordinary	1,848	1,848
9/21/2018	Vanguard Investments Australia Ltd.	BUY	19.38	Ordinary	9,253	9,253
9/21/2018	Vanguard Investments Australia Ltd.	BUY	19.38	Ordinary	10,506	10,506
9/21/2018	Vanguard Investments Australia Ltd.	BUY	19.38	Ordinary	3,174	3,174
9/21/2018	Vanguard Investments Australia Ltd.	BUY	19.38	Ordinary	20,872	20,872
9/26/2018	Vanguard Investments Australia Ltd.	BUY	19.59	Ordinary	3,324	3,324
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.32	Ordinary	10,502	10,502
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.32	Ordinary	4,802	4,802
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.32	Ordinary	9,143	9,143
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.32	Ordinary	1,779	1,779
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.32	Ordinary	8,283	8,283
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.32	Ordinary	14,884	14,884
9/27/2018	Vanguard Investments Australia Ltd.	BUY	19.37	Ordinary	42,658	42,658
9/28/2018	Vanguard Investments Australia Ltd.	SELL	19.50	Ordinary	(704)	(704)
9/28/2018	Vanguard Investments Australia Ltd.	SELL	19.50	Ordinary	(21,574)	(21,574)
10/1/2018	Vanguard Investments Australia Ltd.	BUY	19.50	Ordinary	5,185	5,185
10/1/2018	Vanguard Investments Australia Ltd.	BUY	19.50	Ordinary	4,923	4,923
10/3/2018	Vanguard Investments Australia Ltd.	BUY	19.80	Ordinary	19,720	19,720
10/8/2018	Vanguard Investments Australia Ltd.	BUY	19.65	Ordinary	4,851	4,851
10/9/2018	Vanguard Investments Australia Ltd.	BUY	19.62	Ordinary	3,111	3,111
10/10/2018	Vanguard Investments Australia Ltd.	SELL	19.33	Ordinary	(4,768)	(4,768)
10/11/2018	Vanguard Investments Australia Ltd.	BUY	19.03	Ordinary	6,468	6,468
10/12/2018	Vanguard Investments Australia Ltd.	BUY	18.78	Ordinary	3,111	3,111
10/16/2018	Vanguard Investments Australia Ltd.	SELL	18.70	Ordinary	(6,996)	(6,996)
10/17/2018	Vanguard Investments Australia Ltd.	BUY	18.93	Ordinary	3,111	3,111
10/17/2018	Vanguard Investments Australia Ltd.	BUY	18.93	Ordinary	9,163	9,163
10/22/2018	Vanguard Investments Australia Ltd.	SELL	19.17	Ordinary	(4,035)	(4,035)
10/23/2018	Vanguard Investments Australia Ltd.	BUY	18.65	Ordinary	3,111	3,111
10/23/2018	Vanguard Investments Australia Ltd.	BUY	18.65	Ordinary	4,148	4,148
10/24/2018	Vanguard Investments Australia Ltd.	SELL	18.48	Ordinary	(10,154)	(10,154)
10/24/2018	Vanguard Investments Australia Ltd.	BUY	18.48	Ordinary	6,372	6,372
10/25/2018	Vanguard Investments Australia Ltd.	BUY	17.85	Ordinary	14,403	14,403
10/25/2018	Vanguard Investments Australia Ltd.	SELL	17.85	Ordinary	(4,254)	(4,254)
10/25/2018	Vanguard Investments Australia Ltd.	BUY	17.85	Ordinary	4,148	4,148
10/25/2018	Vanguard Investments Australia Ltd.	BUY	17.85	Ordinary	7,434	7,434
10/29/2018	Vanguard Investments Australia Ltd.	BUY	17.79	Ordinary	4,148	4,148
10/29/2018	Vanguard Investments Australia Ltd.	BUY	17.79	Ordinary	23,167	23,167
10/31/2018	Vanguard Investments Australia Ltd.	BUY	18.00	Ordinary	1,584	1,584
10/31/2018	Vanguard Investments Australia Ltd.	BUY	18.00	Ordinary	8,448	8,448
11/1/2018	Vanguard Investments Australia Ltd.	BUY	17.95	Ordinary	1,056	1,056
11/2/2018	Vanguard Investments Australia Ltd.	BUY	17.82	Ordinary	6,864	6,864
11/5/2018	Vanguard Investments Australia Ltd.	BUY	17.95	Ordinary	25,174	25,174
11/6/2018	Vanguard Investments Australia Ltd.	BUY	18.19	Ordinary	24,990	24,990
11/12/2018	Vanguard Investments Australia Ltd.	SELL	18.20	Ordinary	(11,056)	(11,056)
11/12/2018	Vanguard Investments Australia Ltd.	BUY	18.20	Ordinary	6,799	6,799
11/15/2018	Vanguard Investments Australia Ltd.	SELL	18.44	Ordinary	(4,307)	(4,307)
11/16/2018	Vanguard Investments Australia Ltd.	BUY	18.60	Ordinary	626	626
11/19/2018	Vanguard Investments Australia Ltd.	BUY	18.44	Ordinary	14,578	14,578
11/19/2018	Vanguard Investments Australia Ltd.	SELL	18.40	Ordinary	(25,704)	(25,704)
11/21/2018	Vanguard Investments Australia Ltd.	BUY	18.49	Ordinary	6,591	6,591
11/22/2018	Vanguard Investments Australia Ltd.	BUY	18.66	Ordinary	3,147	3,147
11/22/2018	Vanguard Investments Australia Ltd.	BUY	18.66	Ordinary	3,147	3,147
11/22/2018	Vanguard Investments Australia Ltd.	BUY	18.66	Ordinary	7,588	7,588
11/23/2018	Vanguard Investments Australia Ltd.	BUY	18.67	Ordinary	11,915	11,915
11/29/2018	Vanguard Investments Australia Ltd.	BUY	18.69	Ordinary	5,962	5,962
11/30/2018	Vanguard Investments Australia Ltd.	BUY	18.60	Ordinary	18,684	18,684
12/3/2018	Vanguard Investments Australia Ltd.	BUY	19.08	Ordinary	6,929	6,929
12/3/2018	Vanguard Investments Australia Ltd.	BUY	19.08	Ordinary	13,112	13,112
12/4/2018	Vanguard Investments Australia Ltd.	BUY	19.01	Ordinary	66,991	66,991
12/4/2018	Vanguard Investments Australia Ltd.	BUY	19.01	Ordinary	125,047	125,047
12/6/2018	Vanguard Investments Australia Ltd.	BUY	19.42	Ordinary	3,138	3,138
12/7/2018	Vanguard Investments Australia Ltd.	BUY	19.72	Ordinary	6,465	6,465
12/10/2018	Vanguard Investments Australia Ltd.	BUY	19.47	Ordinary	4,184	4,184
12/11/2018	Vanguard Investments Australia Ltd.	BUY	19.26	Ordinary	3,138	3,138
12/11/2018	Vanguard Investments Australia Ltd.	BUY	19.26	Ordinary	6,648	6,648

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
12/11/2018	Vanguard Investments Australia Ltd.	BUY	19.26	Ordinary	11,080	11,080
12/12/2018	Vanguard Investments Australia Ltd.	BUY	19.57	Ordinary	469,165	469,165
12/14/2018	Vanguard Investments Australia Ltd.	SELL	19.50	Ordinary	(3,324)	(3,324)
12/18/2018	Vanguard Investments Australia Ltd.	BUY	19.82	Ordinary	4,184	4,184
12/19/2018	Vanguard Investments Australia Ltd.	BUY	19.61	Ordinary	78,078	78,078
12/20/2018	Vanguard Investments Australia Ltd.	SELL	20.07	Ordinary	(2,995)	(2,995)
12/20/2018	Vanguard Investments Australia Ltd.	BUY	20.14	Ordinary	39,202	39,202
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	29,134	29,134
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	5,111	5,111
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	4,992	4,992
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	9,584	9,584
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	23,523	23,523
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	12,462	12,462
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	30,260	30,260
12/21/2018	Vanguard Investments Australia Ltd.	BUY	19.99	Ordinary	3,138	3,138
12/21/2018	Vanguard Investments Australia Ltd.	BUY	19.99	Ordinary	352,826	352,826
12/21/2018	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	68,351	68,351
12/27/2018	Vanguard Investments Australia Ltd.	BUY	20.26	Ordinary	3,468	3,468
12/31/2018	Vanguard Investments Australia Ltd.	SELL	20.63	Ordinary	(751)	(751)
12/31/2018	Vanguard Investments Australia Ltd.	SELL	20.63	Ordinary	(16,930)	(16,930)
1/3/2019	Vanguard Investments Australia Ltd.	BUY	20.42	Ordinary	7,179	7,179
1/4/2019	Vanguard Investments Australia Ltd.	BUY	20.58	Ordinary	2,535	2,535
1/8/2019	Vanguard Investments Australia Ltd.	BUY	20.87	Ordinary	5,870	5,870
1/10/2019	Vanguard Investments Australia Ltd.	BUY	21.02	Ordinary	561	561
1/11/2019	Vanguard Investments Australia Ltd.	BUY	21.16	Ordinary	6,996	6,996
1/11/2019	Vanguard Investments Australia Ltd.	BUY	21.25	Ordinary	10,840	10,840
1/18/2019	Vanguard Investments Australia Ltd.	BUY	20.96	Ordinary	6,339	6,339
1/21/2019	Vanguard Investments Australia Ltd.	SELL	20.95	Ordinary	(6,591)	(6,591)
1/21/2019	Vanguard Investments Australia Ltd.	BUY	20.95	Ordinary	3,900	3,900
1/22/2019	Vanguard Investments Australia Ltd.	SELL	20.91	Ordinary	(5,623)	(5,623)
1/22/2019	Vanguard Investments Australia Ltd.	SELL	20.89	Ordinary	(15,566)	(15,566)
1/24/2019	Vanguard Investments Australia Ltd.	SELL	21.44	Ordinary	(6,944)	(6,944)
1/25/2019	Vanguard Investments Australia Ltd.	SELL	21.73	Ordinary	(257)	(257)
1/29/2019	Vanguard Investments Australia Ltd.	BUY	21.63	Ordinary	8,480	8,480
1/30/2019	Vanguard Investments Australia Ltd.	BUY	21.63	Ordinary	2,372	2,372
1/30/2019	Vanguard Investments Australia Ltd.	BUY	21.60	Ordinary	13,565	13,565
2/1/2019	Vanguard Investments Australia Ltd.	BUY	21.56	Ordinary	16,218	16,218
2/4/2019	Vanguard Investments Australia Ltd.	BUY	21.80	Ordinary	8,884	8,884
2/5/2019	Vanguard Investments Australia Ltd.	SELL	21.98	Ordinary	(41,020)	(41,020)
2/12/2019	Vanguard Investments Australia Ltd.	SELL	21.82	Ordinary	(7,121)	(7,121)
2/13/2019	Vanguard Investments Australia Ltd.	BUY	21.85	Ordinary	30,426	30,426
2/14/2019	Vanguard Investments Australia Ltd.	SELL	21.62	Ordinary	(5,372)	(5,372)
2/14/2019	Vanguard Investments Australia Ltd.	SELL	21.62	Ordinary	(8,578)	(8,578)
2/14/2019	Vanguard Investments Australia Ltd.	SELL	21.62	Ordinary	(2,272)	(2,272)
2/19/2019	Vanguard Investments Australia Ltd.	BUY	22.06	Ordinary	6,732	6,732
2/22/2019	Vanguard Investments Australia Ltd.	BUY	21.53	Ordinary	9,670	9,670
2/26/2019	Vanguard Investments Australia Ltd.	SELL	21.30	Ordinary	(14,648)	(14,648)
2/26/2019	Vanguard Investments Australia Ltd.	BUY	21.33	Ordinary	14,670	14,670
2/26/2019	Vanguard Investments Australia Ltd.	BUY	21.33	Ordinary	6,120	6,120
3/5/2019	Vanguard Investments Australia Ltd.	BUY	21.45	Ordinary	39,168	39,168
3/11/2019	Vanguard Investments Australia Ltd.	SELL	21.79	Ordinary	(3,260)	(3,260)
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	645	645
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	17,501	17,501
3/15/2019	Vanguard Investments Australia Ltd.	SELL	22.08	Ordinary	(4,490)	(4,490)
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	325	325
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	8,807	8,807
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	711	711
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	19,290	19,290
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	583	583
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	15,812	15,812
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	385	385
3/15/2019	Vanguard Investments Australia Ltd.	BUY	22.08	Ordinary	10,423	10,423
3/19/2019	Vanguard Investments Australia Ltd.	BUY	21.93	Ordinary	480	480
3/21/2019	Vanguard Investments Australia Ltd.	SELL	21.98	Ordinary	(5,511)	(5,511)
3/22/2019	Vanguard Investments Australia Ltd.	BUY	22.04	Ordinary	8,879	8,879
3/29/2019	Vanguard Investments Australia Ltd.	SELL	21.77	Ordinary	(610)	(610)
3/29/2019	Vanguard Investments Australia Ltd.	SELL	21.77	Ordinary	(20,381)	(20,381)
4/1/2019	Vanguard Investments Australia Ltd.	BUY	21.61	Ordinary	19,247	19,247
4/1/2019	Vanguard Investments Australia Ltd.	BUY	21.61	Ordinary	2,334	2,334

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4/1/2019	Vanguard Investments Australia Ltd.	SELL	21.61	Ordinary	(43,549)	(43,549)
4/1/2019	Vanguard Investments Australia Ltd.	SELL	21.61	Ordinary	(764)	(764)
4/1/2019	Vanguard Investments Australia Ltd.	BUY	21.61	Ordinary	18,506	18,506
4/2/2019	Vanguard Investments Australia Ltd.	BUY	21.55	Ordinary	5,819	5,819
4/2/2019	Vanguard Investments Australia Ltd.	BUY	21.55	Ordinary	8,105	8,105
4/2/2019	Vanguard Investments Australia Ltd.	BUY	21.55	Ordinary	14,857	14,857
4/2/2019	Vanguard Investments Australia Ltd.	BUY	21.61	Ordinary	6,555	6,555
4/2/2019	Vanguard Investments Australia Ltd.	BUY	21.61	Ordinary	4,403	4,403
4/5/2019	Vanguard Investments Australia Ltd.	BUY	21.45	Ordinary	6,386	6,386
4/8/2019	Vanguard Investments Australia Ltd.	BUY	21.71	Ordinary	5,032	5,032
4/8/2019	Vanguard Investments Australia Ltd.	BUY	21.71	Ordinary	582	582
4/9/2019	Vanguard Investments Australia Ltd.	SELL	21.61	Ordinary	(2,196)	(2,196)
4/9/2019	Vanguard Investments Australia Ltd.	BUY	21.61	Ordinary	195,501	195,501
4/10/2019	Vanguard Investments Australia Ltd.	SELL	21.51	Ordinary	(7,214)	(7,214)
4/11/2019	Vanguard Investments Australia Ltd.	BUY	21.77	Ordinary	9,746	9,746
4/15/2019	Vanguard Investments Australia Ltd.	BUY	21.82	Ordinary	131	131
4/16/2019	Vanguard Investments Australia Ltd.	BUY	21.96	Ordinary	40,675	40,675
4/18/2019	Vanguard Investments Australia Ltd.	SELL	21.79	Ordinary	(2,872)	(2,872)
4/23/2019	Vanguard Investments Australia Ltd.	SELL	22.18	Ordinary	(4,824)	(4,824)
4/26/2019	Vanguard Investments Australia Ltd.	SELL	22.80	Ordinary	(6,865)	(6,865)
4/30/2019	Vanguard Investments Australia Ltd.	BUY	22.23	Ordinary	7,596	7,596
5/1/2019	Vanguard Investments Australia Ltd.	BUY	22.18	Ordinary	975	975
5/1/2019	Vanguard Investments Australia Ltd.	BUY	22.17	Ordinary	10,943	10,943
5/1/2019	Vanguard Investments Australia Ltd.	BUY	22.18	Ordinary	1,676	1,676
5/1/2019	Vanguard Investments Australia Ltd.	BUY	22.17	Ordinary	18,823	18,823
5/1/2019	Vanguard Investments Australia Ltd.	BUY	22.18	Ordinary	3,377	3,377
5/1/2019	Vanguard Investments Australia Ltd.	BUY	22.17	Ordinary	37,875	37,875
5/6/2019	Vanguard Investments Australia Ltd.	BUY	22.06	Ordinary	6,378	6,378
5/7/2019	Vanguard Investments Australia Ltd.	SELL	22.36	Ordinary	(1,737)	(1,737)
5/10/2019	Vanguard Investments Australia Ltd.	BUY	22.81	Ordinary	1,926	1,926
5/10/2019	Vanguard Investments Australia Ltd.	BUY	22.81	Ordinary	2,111	2,111
5/10/2019	Vanguard Investments Australia Ltd.	BUY	22.96	Ordinary	5,697	5,697
5/14/2019	Vanguard Investments Australia Ltd.	SELL	22.63	Ordinary	(440)	(440)
5/14/2019	Vanguard Investments Australia Ltd.	SELL	22.58	Ordinary	(12,229)	(12,229)
5/14/2019	Vanguard Investments Australia Ltd.	SELL	22.58	Ordinary	(2,027)	(2,027)
5/14/2019	Vanguard Investments Australia Ltd.	SELL	22.63	Ordinary	(71)	(71)
5/14/2019	Vanguard Investments Australia Ltd.	SELL	22.48	Ordinary	(2,690)	(2,690)
5/16/2019	Vanguard Investments Australia Ltd.	BUY	22.38	Ordinary	11,876	11,876
5/17/2019	Vanguard Investments Australia Ltd.	BUY	22.45	Ordinary	470	470
5/17/2019	Vanguard Investments Australia Ltd.	BUY	22.45	Ordinary	19,800	19,800
5/17/2019	Vanguard Investments Australia Ltd.	BUY	22.45	Ordinary	6,330	6,330
5/21/2019	Vanguard Investments Australia Ltd.	BUY	22.09	Ordinary	6,400	6,400
5/22/2019	Vanguard Investments Australia Ltd.	BUY	22.22	Ordinary	7,084	7,084
5/27/2019	Vanguard Investments Australia Ltd.	SELL	21.30	Ordinary	(14,235)	(14,235)
5/28/2019	Vanguard Investments Australia Ltd.	BUY	20.94	Ordinary	5,770	5,770
5/30/2019	Vanguard Investments Australia Ltd.	BUY	20.67	Ordinary	38,276	38,276
6/3/2019	Vanguard Investments Australia Ltd.	SELL	20.23	Ordinary	(12,614)	(12,614)
6/3/2019	Vanguard Investments Australia Ltd.	SELL	20.23	Ordinary	(6,902)	(6,902)
6/4/2019	Vanguard Investments Australia Ltd.	BUY	20.41	Ordinary	76,272	76,272
6/4/2019	Vanguard Investments Australia Ltd.	BUY	20.41	Ordinary	5,770	5,770
6/5/2019	Vanguard Investments Australia Ltd.	BUY	20.27	Ordinary	2,734	2,734
6/6/2019	Vanguard Investments Australia Ltd.	BUY	20.65	Ordinary	1,540	1,540
6/6/2019	Vanguard Investments Australia Ltd.	BUY	20.65	Ordinary	2,734	2,734
6/6/2019	Vanguard Investments Australia Ltd.	BUY	20.65	Ordinary	6,924	6,924
6/7/2019	Vanguard Investments Australia Ltd.	BUY	20.91	Ordinary	689	689
6/7/2019	Vanguard Investments Australia Ltd.	BUY	20.74	Ordinary	35,095	35,095
6/11/2019	Vanguard Investments Australia Ltd.	SELL	19.40	Ordinary	(2,809)	(2,809)
6/11/2019	Vanguard Investments Australia Ltd.	BUY	19.40	Ordinary	4,101	4,101
6/12/2019	Vanguard Investments Australia Ltd.	BUY	19.68	Ordinary	20,882	20,882
6/13/2019	Vanguard Investments Australia Ltd.	BUY	19.56	Ordinary	2,734	2,734
6/17/2019	Vanguard Investments Australia Ltd.	BUY	19.88	Ordinary	4,704	4,704
6/18/2019	Vanguard Investments Australia Ltd.	SELL	19.77	Ordinary	(37,610)	(37,610)
6/19/2019	Vanguard Investments Australia Ltd.	SELL	19.91	Ordinary	(33,849)	(33,849)
6/20/2019	Vanguard Investments Australia Ltd.	SELL	20.34	Ordinary	(7,889)	(7,889)
6/20/2019	Vanguard Investments Australia Ltd.	SELL	20.37	Ordinary	(30,464)	(30,464)
6/21/2019	Vanguard Investments Australia Ltd.	BUY	20.39	Ordinary	3,000	3,000
6/21/2019	Vanguard Investments Australia Ltd.	SELL	20.39	Ordinary	(1,929)	(1,929)
6/21/2019	Vanguard Investments Australia Ltd.	BUY	20.39	Ordinary	9,347	9,347
6/21/2019	Vanguard Investments Australia Ltd.	SELL	20.39	Ordinary	(274,180)	(274,180)



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6/21/2019	Vanguard Investments Australia Ltd.	BUY	20.39	Ordinary	4,098	4,098
6/21/2019	Vanguard Investments Australia Ltd.	BUY	20.39	Ordinary	3,528	3,528
6/21/2019	Vanguard Investments Australia Ltd.	BUY	20.39	Ordinary	27,235	27,235
6/25/2019	Vanguard Investments Australia Ltd.	SELL	20.15	Ordinary	(6,977)	(6,977)
6/26/2019	Vanguard Investments Australia Ltd.	BUY	20.14	Ordinary	3,477	3,477
6/27/2019	Vanguard Investments Australia Ltd.	SELL	20.12	Ordinary	(5,333)	(5,333)
6/27/2019	Vanguard Investments Australia Ltd.	BUY	20.12	Ordinary	4,644	4,644
6/27/2019	Vanguard Investments Australia Ltd.	BUY	20.12	Ordinary	4,116	4,116
6/28/2019	Vanguard Investments Australia Ltd.	SELL	20.01	Ordinary	(13,763)	(13,763)
7/2/2019	Vanguard Investments Australia Ltd.	BUY	20.44	Ordinary	3,441	3,441
7/2/2019	Vanguard Investments Australia Ltd.	BUY	20.44	Ordinary	7,020	7,020
7/8/2019	Vanguard Investments Australia Ltd.	BUY	20.55	Ordinary	6,882	6,882
7/8/2019	Vanguard Investments Australia Ltd.	BUY	20.55	Ordinary	3,510	3,510
7/9/2019	Vanguard Investments Australia Ltd.	BUY	20.28	Ordinary	3,510	3,510
7/9/2019	Vanguard Investments Australia Ltd.	BUY	20.28	Ordinary	10,147	10,147
7/11/2019	Vanguard Investments Australia Ltd.	BUY	20.51	Ordinary	3,522	3,522
7/12/2019	Vanguard Investments Australia Ltd.	SELL	20.59	Ordinary	(2,923)	(2,923)
7/15/2019	Vanguard Investments Australia Ltd.	BUY	20.31	Ordinary	3,124	3,124
7/15/2019	Vanguard Investments Australia Ltd.	BUY	20.31	Ordinary	13,794	13,794
7/15/2019	Vanguard Investments Australia Ltd.	BUY	20.22	Ordinary	3,441	3,441
7/16/2019	Vanguard Investments Australia Ltd.	SELL	20.28	Ordinary	(17,341)	(17,341)
7/16/2019	Vanguard Investments Australia Ltd.	SELL	20.28	Ordinary	(17,684)	(17,684)
7/16/2019	Vanguard Investments Australia Ltd.	BUY	20.35	Ordinary	8,094	8,094
7/16/2019	Vanguard Investments Australia Ltd.	BUY	20.35	Ordinary	4,854	4,854
7/16/2019	Vanguard Investments Australia Ltd.	BUY	20.47	Ordinary	7,056	7,056
7/16/2019	Vanguard Investments Australia Ltd.	BUY	20.47	Ordinary	8,853	8,853
7/17/2019	Vanguard Investments Australia Ltd.	SELL	20.59	Ordinary	(8,012)	(8,012)
7/18/2019	Vanguard Investments Australia Ltd.	SELL	20.22	Ordinary	(2,810)	(2,810)
7/19/2019	Vanguard Investments Australia Ltd.	SELL	20.72	Ordinary	(5,353)	(5,353)
7/19/2019	Vanguard Investments Australia Ltd.	BUY	20.72	Ordinary	7,877	7,877
7/22/2019	Vanguard Investments Australia Ltd.	SELL	20.70	Ordinary	(403,123)	(403,123)
7/22/2019	Vanguard Investments Australia Ltd.	BUY	20.70	Ordinary	3,441	3,441
7/30/2019	Vanguard Investments Australia Ltd.	BUY	21.21	Ordinary	6,501	6,501
7/31/2019	Vanguard Investments Australia Ltd.	BUY	20.97	Ordinary	3,438	3,438
8/1/2019	Vanguard Investments Australia Ltd.	SELL	20.44	Ordinary	(3,972)	(3,972)
8/6/2019	Vanguard Investments Australia Ltd.	BUY	19.79	Ordinary	4,584	4,584
8/6/2019	Vanguard Investments Australia Ltd.	BUY	19.79	Ordinary	5,364	5,364
8/6/2019	Vanguard Investments Australia Ltd.	BUY	19.79	Ordinary	5,364	5,364
8/6/2019	Vanguard Investments Australia Ltd.	BUY	19.79	Ordinary	13,134	13,134
8/7/2019	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	8,022	8,022
8/7/2019	Vanguard Investments Australia Ltd.	BUY	20.00	Ordinary	7,873	7,873
8/8/2019	Vanguard Investments Australia Ltd.	BUY	19.08	Ordinary	6,545	6,545
8/8/2019	Vanguard Investments Australia Ltd.	BUY	19.08	Ordinary	10,454	10,454
8/9/2019	Vanguard Investments Australia Ltd.	BUY	19.25	Ordinary	8,315	8,315
8/12/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	6,545	6,545
8/14/2019	Vanguard Investments Australia Ltd.	BUY	19.07	Ordinary	1,562	1,562
8/14/2019	Vanguard Investments Australia Ltd.	BUY	19.07	Ordinary	4,604	4,604
8/14/2019	Vanguard Investments Australia Ltd.	BUY	19.07	Ordinary	14,325	14,325
8/15/2019	Vanguard Investments Australia Ltd.	BUY	18.78	Ordinary	4,600	4,600
8/16/2019	Vanguard Investments Australia Ltd.	BUY	19.01	Ordinary	9,590	9,590
8/19/2019	Vanguard Investments Australia Ltd.	BUY	18.92	Ordinary	11,302	11,302
8/20/2019	Vanguard Investments Australia Ltd.	SELL	19.01	Ordinary	(7,011)	(7,011)
8/20/2019	Vanguard Investments Australia Ltd.	SELL	19.01	Ordinary	(41,347)	(41,347)
8/20/2019	Vanguard Investments Australia Ltd.	SELL	19.01	Ordinary	(7,908)	(7,908)
8/20/2019	Vanguard Investments Australia Ltd.	BUY	19.24	Ordinary	7,928	7,928
8/20/2019	Vanguard Investments Australia Ltd.	BUY	19.24	Ordinary	8,326	8,326
8/21/2019	Vanguard Investments Australia Ltd.	BUY	18.58	Ordinary	3,456	3,456
8/22/2019	Vanguard Investments Australia Ltd.	BUY	18.57	Ordinary	8,518	8,518
8/27/2019	Vanguard Investments Australia Ltd.	BUY	18.69	Ordinary	260,546	260,546
8/27/2019	Vanguard Investments Australia Ltd.	BUY	18.69	Ordinary	8,489	8,489
8/28/2019	Vanguard Investments Australia Ltd.	BUY	18.78	Ordinary	18,459	18,459
8/29/2019	Vanguard Investments Australia Ltd.	BUY	18.92	Ordinary	3,468	3,468
8/30/2019	Vanguard Investments Australia Ltd.	BUY	18.96	Ordinary	18,630	18,630
8/30/2019	Vanguard Investments Australia Ltd.	BUY	18.96	Ordinary	5,854	5,854
9/2/2019	Vanguard Investments Australia Ltd.	BUY	19.08	Ordinary	13,332	13,332
9/3/2019	Vanguard Investments Australia Ltd.	BUY	19.11	Ordinary	65,396	65,396
9/4/2019	Vanguard Investments Australia Ltd.	BUY	19.00	Ordinary	8,974	8,974
9/4/2019	Vanguard Investments Australia Ltd.	BUY	19.00	Ordinary	4,636	4,636
9/5/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	4,652	4,652



Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
9/5/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	13,868	13,868
9/5/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	14,369	14,369
9/6/2019	Vanguard Investments Australia Ltd.	SELL	18.90	Ordinary	(3,117)	(3,117)
9/9/2019	Vanguard Investments Australia Ltd.	BUY	18.96	Ordinary	4,652	4,652
9/10/2019	Vanguard Investments Australia Ltd.	BUY	18.98	Ordinary	5,570	5,570
9/12/2019	Vanguard Investments Australia Ltd.	BUY	19.01	Ordinary	5,515	5,515
9/13/2019	Vanguard Investments Australia Ltd.	SELL	19.13	Ordinary	(2,816)	(2,816)
9/17/2019	Vanguard Investments Australia Ltd.	BUY	18.98	Ordinary	11,609	11,609
9/18/2019	Vanguard Investments Australia Ltd.	SELL	18.79	Ordinary	(5,269)	(5,269)
9/19/2019	Vanguard Investments Australia Ltd.	BUY	19.15	Ordinary	3,489	3,489
9/20/2019	Vanguard Investments Australia Ltd.	SELL	18.88	Ordinary	(27,584)	(27,584)
9/20/2019	Vanguard Investments Australia Ltd.	BUY	18.85	Ordinary	6,100	6,100
9/23/2019	Vanguard Investments Australia Ltd.	BUY	18.96	Ordinary	8,880	8,880
9/25/2019	Vanguard Investments Australia Ltd.	SELL	19.13	Ordinary	(5,303)	(5,303)
9/25/2019	Vanguard Investments Australia Ltd.	BUY	19.13	Ordinary	8,316	8,316
9/27/2019	Vanguard Investments Australia Ltd.	BUY	19.09	Ordinary	4,640	4,640
9/27/2019	Vanguard Investments Australia Ltd.	BUY	19.09	Ordinary	8,120	8,120
9/27/2019	Vanguard Investments Australia Ltd.	BUY	19.09	Ordinary	7,152	7,152
9/30/2019	Vanguard Investments Australia Ltd.	BUY	19.21	Ordinary	5,905	5,905
9/30/2019	Vanguard Investments Australia Ltd.	SELL	19.16	Ordinary	(20,199)	(20,199)
10/2/2019	Vanguard Investments Australia Ltd.	BUY	19.17	Ordinary	15,249	15,249
10/2/2019	Vanguard Investments Australia Ltd.	BUY	19.17	Ordinary	7,882	7,882
10/2/2019	Vanguard Investments Australia Ltd.	BUY	19.16	Ordinary	11,248	11,248
10/2/2019	Vanguard Investments Australia Ltd.	SELL	19.16	Ordinary	(14,208)	(14,208)
10/3/2019	Vanguard Investments Australia Ltd.	BUY	19.00	Ordinary	7,920	7,920
10/3/2019	Vanguard Investments Australia Ltd.	BUY	18.97	Ordinary	6,852	6,852
10/4/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	5,003	5,003
10/4/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	10,559	10,559
10/4/2019	Vanguard Investments Australia Ltd.	BUY	19.02	Ordinary	10,115	10,115
10/9/2019	Vanguard Investments Australia Ltd.	BUY	19.19	Ordinary	5,705	5,705
10/11/2019	Vanguard Investments Australia Ltd.	BUY	19.26	Ordinary	3,100	3,100
10/11/2019	Vanguard Investments Australia Ltd.	BUY	19.26	Ordinary	4,760	4,760
10/14/2019	Vanguard Investments Australia Ltd.	SELL	19.18	Ordinary	(5,192)	(5,192)
10/17/2019	Vanguard Investments Australia Ltd.	BUY	19.34	Ordinary	6,299	6,299
10/17/2019	Vanguard Investments Australia Ltd.	BUY	19.34	Ordinary	4,564	4,564
10/18/2019	Vanguard Investments Australia Ltd.	BUY	19.13	Ordinary	3,423	3,423
10/18/2019	Vanguard Investments Australia Ltd.	BUY	19.13	Ordinary	5,980	5,980
10/18/2019	Vanguard Investments Australia Ltd.	BUY	19.18	Ordinary	13,617	13,617
10/21/2019	Vanguard Investments Australia Ltd.	BUY	19.25	Ordinary	6,204	6,204
10/22/2019	Vanguard Investments Australia Ltd.	BUY	19.46	Ordinary	5,990	5,990
10/22/2019	Vanguard Investments Australia Ltd.	BUY	19.46	Ordinary	10,445	10,445
10/23/2019	Vanguard Investments Australia Ltd.	BUY	19.51	Ordinary	5,887	5,887
10/23/2019	Vanguard Investments Australia Ltd.	BUY	19.51	Ordinary	4,041	4,041
10/23/2019	Vanguard Investments Australia Ltd.	BUY	19.61	Ordinary	6,689	6,689
10/28/2019	Vanguard Investments Australia Ltd.	BUY	19.71	Ordinary	5,980	5,980
10/30/2019	Vanguard Investments Australia Ltd.	BUY	19.51	Ordinary	3,423	3,423
10/30/2019	Vanguard Investments Australia Ltd.	BUY	19.51	Ordinary	4,564	4,564
10/30/2019	Vanguard Investments Australia Ltd.	BUY	19.50	Ordinary	10,404	10,404
10/31/2019	Vanguard Investments Australia Ltd.	BUY	19.78	Ordinary	10,290	10,290
10/31/2019	Vanguard Investments Australia Ltd.	SELL	19.78	Ordinary	(7,188)	(7,188)
10/31/2019	Vanguard Investments Australia Ltd.	BUY	19.78	Ordinary	14,376	14,376
10/31/2019	Vanguard Investments Australia Ltd.	BUY	19.79	Ordinary	29,757	29,757
11/1/2019	Vanguard Investments Australia Ltd.	SELL	19.70	Ordinary	(79,659)	(79,659)
11/1/2019	Vanguard Investments Australia Ltd.	SELL	19.71	Ordinary	(14,132)	(14,132)
11/1/2019	Vanguard Investments Australia Ltd.	BUY	19.71	Ordinary	3,423	3,423
11/1/2019	Vanguard Investments Australia Ltd.	BUY	19.71	Ordinary	4,564	4,564
11/1/2019	Vanguard Investments Australia Ltd.	BUY	19.71	Ordinary	9,004	9,004
11/4/2019	Vanguard Investments Australia Ltd.	SELL	19.64	Ordinary	(106,880)	(106,880)
11/4/2019	Vanguard Investments Australia Ltd.	BUY	19.67	Ordinary	14,044	14,044
11/5/2019	Vanguard Investments Australia Ltd.	SELL	19.66	Ordinary	(25,116)	(25,116)
11/5/2019	Vanguard Investments Australia Ltd.	BUY	19.66	Ordinary	4,564	4,564
11/5/2019	Vanguard Investments Australia Ltd.	BUY	19.66	Ordinary	7,176	7,176
11/6/2019	Vanguard Investments Australia Ltd.	BUY	19.63	Ordinary	9,289	9,289
11/7/2019	Vanguard Investments Australia Ltd.	BUY	19.94	Ordinary	5,340	5,340
11/7/2019	Vanguard Investments Australia Ltd.	SELL	19.95	Ordinary	(10,963)	(10,963)
11/7/2019	Vanguard Investments Australia Ltd.	SELL	19.95	Ordinary	(11,947)	(11,947)
11/7/2019	Vanguard Investments Australia Ltd.	BUY	19.95	Ordinary	4,556	4,556
11/7/2019	Vanguard Investments Australia Ltd.	BUY	19.95	Ordinary	3,620	3,620
11/11/2019	Vanguard Investments Australia Ltd.	BUY	20.14	Ordinary	17,238	17,238

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
11/12/2019	Vanguard Investments Australia Ltd.	SELL	20.02	Ordinary	(2,505)	(2,505)
11/12/2019	Vanguard Investments Australia Ltd.	BUY	20.02	Ordinary	3,435	3,435
11/12/2019	Vanguard Investments Australia Ltd.	BUY	20.02	Ordinary	6,556	6,556
11/13/2019	Vanguard Investments Australia Ltd.	BUY	19.86	Ordinary	1,788	1,788
11/14/2019	Vanguard Investments Australia Ltd.	BUY	19.98	Ordinary	12,008	12,008
11/14/2019	Vanguard Investments Australia Ltd.	BUY	19.98	Ordinary	1,560	1,560
11/15/2019	Vanguard Investments Australia Ltd.	BUY	20.13	Ordinary	4,592	4,592
11/19/2019	Vanguard Investments Australia Ltd.	SELL	20.25	Ordinary	(1,249)	(1,249)
11/19/2019	Vanguard Investments Australia Ltd.	BUY	20.25	Ordinary	7,735	7,735
11/20/2019	Vanguard Investments Australia Ltd.	SELL	19.98	Ordinary	(49,469)	(49,469)
11/20/2019	Vanguard Investments Australia Ltd.	BUY	19.98	Ordinary	4,172	4,172
11/21/2019	Vanguard Investments Australia Ltd.	BUY	19.81	Ordinary	4,592	4,592
11/21/2019	Vanguard Investments Australia Ltd.	BUY	19.81	Ordinary	12,516	12,516
11/22/2019	Vanguard Investments Australia Ltd.	BUY	19.89	Ordinary	2,340	2,340
11/22/2019	Vanguard Investments Australia Ltd.	BUY	19.89	Ordinary	3,444	3,444
11/22/2019	Vanguard Investments Australia Ltd.	BUY	19.89	Ordinary	18,663	18,663

This is Annexure A of 15 pages referred to in Form 604, Notice of change of interests of substantial holder.

Signature: 

Name: Keith Delgado

Capacity: Compliance Manager

Date: 26 November 2019