PENTAIR plc
Form 11-K
June 17, 2016

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

FORM 11-K

þ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2015
OR

¨ TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number 001-11625

A. Full title of the plan and the address of the plan if different from that of the issuer named below:
Pentair, Inc. Retirement Savings and Stock Incentive Plan
Pentair, Inc.
5500 Wayzata Boulevard, Suite 600
Golden Valley, Minnesota 55416

B: Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:
Pentair plc
P.O. Box 471
Sharp Street
Walkden
Manchester M28 8BU
United Kingdom

PENTAIR, INC. RETIREMENT SAVINGS AND STOCK INCENTIVE PLAN
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NOTE: All other schedules required by Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Trustee and Participants of
Pentair, Inc. Retirement Savings and Stock Incentive Plan
Golden Valley, Minnesota

We have audited the accompanying statements of net assets available for benefits of the Pentair, Inc. Retirement Savings and Stock Incentive Plan (the "Plan") as of December 31, 2015 and 2014, and the related statement of changes in net assets available for benefits for the year ended December 31, 2015. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2015 and 2014, and the changes in net assets available for benefits for the year ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

The supplemental schedules listed in the Table of Contents have been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental schedules are the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental schedules reconcile to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental schedules. In forming our opinion on the supplemental schedules, we evaluated whether the supplemental schedules, including their form and content, 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. In our opinion, such schedules are fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ Deloitte & Touche LLP

Minneapolis, Minnesota
June 17, 2016

PENTAIR, INC. RETIREMENT SAVINGS AND STOCK INCENTIVE PLAN
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
AS OF DECEMBER 31, 2015 AND 2014

	2015	2014
ASSETS:		
Notes receivable from participants	$15,286,357	$16,768,211
Employee contributions receivable	1,254,641	1,211,659
Employer contributions receivable	9,088,068	9,459,913
Other receivables	195	409,407
Total receivables	25,629,261	27,849,190
Investments — at fair value	797,837,919	847,962,627
Investments — at contract value	123,065,506	129,248,179
Total assets	946,532,686	1,005,059,996
LIABILITIES:		
Investment settlements payable	21,553	53,105
Total liabilities	21,553	53,105
NET ASSETS AVAILABLE FOR BENEFITS	$946,511,133	$1,005,006,891

See notes to financial statements.

PENTAIR, INC. RETIREMENT SAVINGS AND STOCK INCENTIVE PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2015

ADDITIONS:	
Employee contributions	$44,837,058
Employer contributions	26,217,037
Rollover contributions	4,426,820
Interest and dividend income	25,122,196
Total additions	100,603,111
DEDUCTIONS:	
Distributions to participants	106,628,118
Administrative expenses	55,906
Net depreciation in the fair value of investments	53,231,933
Total deductions	159,915,957
NET DEDUCTIONS BEFORE PLAN TRANSFERS	(59,312,846)
PLAN TRANSFERS (see Note 1)	817,088
NET DEDUCTIONS	(58,495,758)
NET ASSETS AVAILABLE FOR BENEFITS — Beginning of year	1,005,006,891
NET ASSETS AVAILABLE FOR BENEFITS — End of year	$946,511,133

See notes to financial statements.

Notes to financial statements
As of December 31, 2015 and 2014, and for the year ended December 31, 2015

1. DESCRIPTION OF THE PLAN

The following description of the Pentair, Inc. Retirement Savings and Stock Incentive Plan (the "Plan") provides only general information. Participants should refer to the Plan document for a more complete description of the Plan.

General Information - The Plan is a defined contribution profit-sharing plan with a cash or deferred arrangement described in Internal Revenue Code ("IRC") Section 401(k) and an employee stock ownership plan ("ESOP") component of the stock-bonus type. With certain exceptions, the Plan covers employees of Pentair, Inc. (the "Company") and its U.S. subsidiaries who have attained age 18, although such employees must have one year of service before becoming eligible for employer discretionary contributions. The Company is a subsidiary of Pentair plc and is the Plan sponsor as well as Plan administrator. Fidelity Management Trust Company ("Fidelity") is recordkeeper and trustee of the Plan, including the ESOP. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA"), as amended.

On December 28, 2015, the Nuheat, Inc. 401(k) Plan was merged into the Plan, which resulted in assets of $817,088 being transferred into the Plan.

Participation - Participation for regular full- and part-time employees may commence effective with the date of hire. Contributions are subject to a maximum of 50% of pretax compensation and 15% of after-tax compensation for a combined limit of 65% of compensation. Employee contributions are also subject to the IRC 402(g) limitation of $18,000 and $17,500 for 2015 and 2014, respectively.

The Plan has an automatic enrollment feature for new non-union employees at a rate of 3% with an automatic annual increase of 1% per year until the participant reaches a deferral rate of 10%. Employees can opt-out of automatic enrollment at any time.

Non-union matching contributions are 100% of the first 1% and 50% of the next 5% of participant contributions and are made in the form of cash. Union matching contributions are made in accordance with the respective union contract agreements, with the majority of the union matching contributions being 50% of the first 5% of pretax participant contributions. The Plan allows for catch-up contributions to be made to the Plan up to the IRC limitation of $6,000 and $5,500 for 2015 and 2014, respectively.

An employer discretionary contribution of 1.5% of annual base compensation was made at year-end for all participants who had completed a year of eligible service during the Plan years 2015 and 2014. Discretionary contributions are made in the form of cash to purchase Pentair plc common stock.

Certain grandfathered groups of employees may receive an additional employer discretionary contribution of 1% to 5% in addition to the 1.5% employer discretionary contribution.

Participant Accounts - Individual accounts are maintained for each Plan participant. Each participant's account is credited with the participant's contributions, the Company's matching contributions and allocations of Company discretionary contributions and Plan earnings, and charged with withdrawals and allocations of Plan losses and administrative expenses. Allocations are based on participant earnings or account balances, as defined in the Plan document. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Investments - Participants direct the investment of their contributions into various investment options offered by the Plan. Company discretionary contributions are automatically invested in Pentair plc common stock. The Plan currently offers various investment alternatives to Plan participants, consisting of corporate stock, mutual funds and a stable value fund. Investment management fees are charged against 401(k) trust earnings prior to the allocation of earnings.

Notes receivable from participants - Loans for any reason are allowed under the Plan. The interest rate charged is prime rate plus 1% at the time funds are borrowed. The maximum maturity of the loans is five years (15 years for loans to purchase a primary residence). The minimum loan amount is $1,000, and the maximum is the lesser of 50% of the vested account balance or $50,000. Due to transfers of notes receivable from participants related to plan mergers in the current and prior years, loans outstanding as of December 31, 2015 may bear interest at rates higher

than the prime rate plus 1%, however, there are no loans outstanding with an original maturity greater than 15 years.
Vesting - All elective deferral, after-tax, matching and discretionary contributions are immediately 100% vested.
Administrative Expenses - Administrative expenses of the Plan are paid in part by the Plan sponsor and the participants as provided in the Plan document.

Notes to financial statements
As of December 31, 2015 and 2014, and for the year ended December 31, 2015

Payment of Benefits - Upon severance from service for any reason, a participant may elect to receive a lump-sum amount equal to the value of the participant's vested interest in his or her account. Some participants can also elect annual installments over a term-certain period.

Withdrawals - Hardship withdrawals are available for immediate and heavy financial need up to the amount of before-tax contributions, but not earnings. Hardship withdrawals can occur any time with a maximum of one per calendar year.

2. SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Plan have been prepared on the accrual basis of accounting and in accordance with accounting principles generally accepted in the United States of America ("GAAP").

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

The Plan provides various investment options to its participants, including corporate stock, mutual funds and a stable value fund. Investment securities, in general, are exposed to various risks, such as interest rate risk, credit risk and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

The Plan's investments are stated at fair value, except for fully benefit-responsive investment contracts which are stated at contract value as a result of a new accounting standard adopted in 2015 (discussed below). Accounting guidance related to fair value measurements, which establishes a single authoritative definition of fair value, sets a framework for measuring fair value, and requires additional disclosures about fair value measurements (see Note 4).

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Net appreciation and depreciation in the fair value of investments includes gains and losses in investments sold during the year as well as appreciation and depreciation of the investments held at year end.

The Managed Income Portfolio II Fund is valued using the net asset value ("NAV") per share. The fund's contract value as of December 31, 2015 was $123,065,506. The redemption frequency is daily. There is no redemption notice period for the individual participant level; however, there is up to a 12 month redemption notice period for the Plan level.

Notes receivable from participants are measured at their unpaid balance plus any accrued but unpaid interest. Delinquent participant loans are recorded as distributions based on the terms of the Plan document.

Benefit payments to participants are recorded upon distribution. There were no participants who have elected to withdraw from the Plan but had not yet been paid at December 31, 2015 and 2014.

In July 2015, the Financial Accounting Standards Board issued a new accounting standard which provides guidance on certain aspects of the accounting by employee benefit plans, specifically related to fully benefit-responsive investment contracts and certain plan investment disclosure requirements. Under the new standard, fully benefit-responsive investment contracts must be measured at their contract value rather than fair value. Additionally, the new standard simplifies plan investment disclosure requirements. The standard is effective for fiscal years beginning after December 15, 2015, with early adoption permitted. We adopted the standard in 2015 and have retrospectively applied the standard to all periods presented. The adoption resulted in the reclassification of the adjustment from fair value to contract value for fully benefit-responsive investment contracts, totaling $1,887,368 for 2014, in the statements of net assets available for benefits. Certain historical disclosures that are no longer required were removed.

3. SYNTHETIC GUARANTEED INVESTMENT CONTRACT

The Plan provides participants a stable value investment option managed by Fidelity Management Trust Company. The fund, the Managed Income Portfolio II Fund of the Fidelity Group for Employee Benefit Plans ("MIP II") includes synthetic guaranteed investment contracts (the "wrap contracts"), a portfolio of financial instruments that are held in trust and owned by the plans participating in MIP II. The wrap contracts cover the underlying portfolio of financial instruments and require that all participant-initiated transactions be executed at contract value. Contract value represents contributions made to the fund, plus earnings, less participant withdrawals.

Wrap contracts accrue interest using a formula called the "crediting rate." Wrap contracts use the crediting rate formula to convert market value changes in the covered assets into income distributions in order to minimize the difference between

Notes to financial statements
As of December 31, 2015 and 2014, and for the year ended December 31, 2015

the market and contract value of the covered assets over time. Using the crediting rate formula, an estimated future market value is calculated by compounding the fund's current market value at the fund's current yield to maturity for a period equal to the fund's duration. The crediting rate is the discount rate that equates the estimated future market value with the fund's current contract value. Crediting rates are reset quarterly. The wrap contracts provide a guarantee that the crediting rate will not fall below 0%. The crediting rate is 1.52% for 2015.

The crediting rate, and hence the fund's return, may be affected by many factors, including purchases and redemptions by shareholders. The precise impact on the fund depends on whether the market value of the covered assets is higher or lower than the contract value of those assets. If the market value of the covered assets is higher than their contract value, the crediting rate will ordinarily be higher than the yield of the covered assets. Under these circumstances, cash from new investors will tend to lower the crediting rate and the fund's return, and redemptions by existing shareholders will tend to increase the crediting rate and the fund's return.

If the market value of the covered assets is lower than their contract value, the crediting rate will ordinarily be lower than the yield of the covered assets. When market value is lower than contract value, the fund will have, for example, less than $10 in cash and bonds for every $10 in NAV. Under these circumstances, cash from new investors will tend to increase the market value attributed to the covered assets and to increase the crediting rate and the fund's return. Redemptions by existing shareholders will have the opposite effect and will tend to reduce the market value attributed to remaining covered assets and to reduce the crediting rate and the fund's return. Generally, the market value of covered assets will tend to be higher than contract value after interest rates have fallen due to higher bond prices. Conversely, the market value of covered assets will tend to be lower than their contract value after interest rates have risen due to lower bond prices.

If the fund experiences significant redemptions when the market value is below the contract value, the fund's yield may be reduced significantly to a level that is not competitive with other investment options. This may result in additional redemptions, which would tend to lower the crediting rate further. If redemptions continue, the fund's yield could be reduced to zero. If redemptions continue thereafter, the fund might have insufficient assets to meet redemption requests, at which point the fund would require payments from the wrap issuer to pay further shareholder redemptions.

The fund and the wrap contracts purchased by the fund are designed to pay all participant-initiated transactions at contract value. Participant-initiated transactions are those transactions allowed by the Plan (typically this would include withdrawals for benefits, loans, or transfers to noncompeting funds within a plan). However, the wrap contracts limit the ability of the fund to transact at contract value upon the occurrence of certain events. These events include:

- The Plan's failure to qualify under Section 401(a) or Section 401(k) of the IRC
- The establishment of a defined contribution plan that competes with the Plan for employee contributions
- Any substantive modification of the Plan or the administration of the Plan that is not consented to by the wrap issuer
- Complete or partial termination of the Plan
- Any change in law, regulation, or administrative ruling applicable to the Plan that could have a material adverse effect on the fund's cash flow
- Merger or consolidation of the Plan into another plan; the transfer of Plan assets to another plan; or the sale, spin-off, or merger of a subsidiary or division of the Plan sponsor
- Any communication given to participants by the Plan sponsor or any other Plan fiduciary that is designed to induce or influence participants not to invest in the fund or to transfer assets out of the fund
- Exclusion of a group of previously eligible employees from eligibility in the Plan
- Any early retirement program, group termination, group layoff, facility closing, or similar program
- Any transfer of assets from the fund directly to a competing option

A wrap issuer may terminate a wrap contract at any time. In the event that the market value of the fund's covered assets is below its contract value at the time of such termination, Fidelity may elect to keep the wrap contract in place until such time as the market value of the fund's covered assets is equal to its contract value. A wrap issuer may also terminate a wrap contract if Fidelity's investment management authority over the fund is limited or terminated as well as if all of the terms of the wrap contract failed to be met. In the event that the market value of the fund's covered assets is below its contract value at the time of such termination, the terminating wrap provider would not be required to make a payment to the fund. The Plan sponsor does not believe that any events that may limit the ability of the Plan to transact at contract value are probable.

Notes to financial statements
As of December 31, 2015 and 2014, and for the year ended December 31, 2015

	December 31, 2015	
Average yields:		
Based on annualized earnings (1)	1.97	%
Based on interest rate credited to participants (2)	1.52	

(1) Computed by dividing the annualized one-day actual earnings of the contract on the last day of the Plan year by the fair value of the investments on the same date.

(2) Computed by dividing the annualized one-day earnings credited to participants on the last day of the Plan year by fair value of the investments on the same date.

4. FAIR VALUE MEASUREMENTS

The Plan's estimates of fair value for financial assets are based on the framework established in the fair value accounting guidance. Fair value is the price that would be received by the Plan for an asset or paid by the Plan to transfer a liability (an exit price) in an orderly transaction between market participants on the measurement date in the Plan's principal or most advantageous market for the asset or liability. Fair value measurements are determined by maximizing the use of observable inputs and minimizing the use of unobservable inputs. The hierarchy places the highest priority on unadjusted quoted market prices in active markets for identical assets or liabilities (level 1 measurements) and gives the lowest priority to unobservable inputs (level 3 measurements). The three levels of inputs within the fair value hierarchy are defined as follows:

Level 1: Quoted prices (unadjusted) for identical assets or liabilities in active markets that the Plan has the ability to access.

Level 2: Significant other observable inputs other than level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3: Significant unobservable inputs that reflect the Plan's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

In some cases, a valuation technique used to measure fair value may include inputs from multiple levels of the fair value hierarchy. The lowest level of significant input determines the placement of the entire fair value measurement in the hierarchy.

Certain investments are measured at fair value on a recurring basis in the statements of net assets available for benefits. The following methods and assumptions were used to estimate the fair values:

Mutual funds, common stock and other investments - These investments are classified as Level 1 and consist of various publicly-traded money market funds, mutual funds, common stock and other investments. Common stock is valued at quoted market prices. Shares of mutual funds are valued at quoted market prices, which represent the NAV of shares held by the Plan at period-end, and are actively traded.

Common/collective trusts - These investments are classified as Level 2 and consist of investments in other collective investment trust funds. The underlying investments in these collective investment trust funds primarily include intermediate and long-term debt securities, corporate debt securities, equity securities and fixed income securities. The overall fair value of the common/collective trusts are based on observable inputs.

Notes to financial statements
As of December 31, 2015 and 2014, and for the year ended December 31, 2015

The fair values of the Plan's investments measured at fair value on a recurring basis and their respective level within the fair value hierarchy as of December 31, 2015 and 2014 were as follows:

	December 31, 2015			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Pentair plc common stock	$99,597,252	$ —	$ —	$99,597,252
Interest-bearing cash	1,231,593	—	—	1,231,593
Mutual funds:				
Blended funds	175,376,931	—	—	175,376,931
Growth funds	156,948,494	—	—	156,948,494
Value funds	71,582,168	—	—	71,582,168
International funds	36,343,300	—	—	36,343,300
Common/collective trusts				