



## **Background**

Heilbrunn worked for different Commonwealth agencies during two different periods of time. His first period of state service began on August 11, 1977, and it ended on May 14, 1986, with his retirement. At this retirement, Heilbrunn elected a lump sum payment of \$16,766.54, which represented the total of his contributions to the State Employees' Retirement Fund, and a monthly annuity of \$102.34. On December 14, 1992, Heilbrunn returned to state service. His monthly annuity ceased, and the present value of his remaining annuity benefit was frozen at \$24,533.90. His second period of state service lasted from December 14, 1992, to June 28, 2007. On June 29, 2007, he retired for the second time.

During Heilbrunn's second period of state service, the General Assembly revised the methodology for calculating the present value of the retirement annuity benefit of a state employee who suspends his retirement and returns to state service. Prior to these amendments to the State Employees' Retirement Code (Retirement Code),<sup>1</sup> the present value of the employee's annuity benefit at second retirement was calculated by adding the frozen value of his annuity, which was \$24,533.90 in Heilbrunn's case, to the value of his annuity benefit earned during the second period of state service. Under the 1994 amendments, the present value of the second retirement annuity account is calculated in one of two ways, whichever yields the higher number. The first uses the calculation in effect prior to the 1994 amendments. The second uses a methodology called the "thawed" frozen present value calculation.

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<sup>1</sup> 71 Pa. C.S. §§5101-5957.

Under this methodology, first, the present value of the member's annuity is calculated as if he had never retired from state service and collected an annuity. Stated otherwise, it is assumed that the member's contributions had remained in the Fund and continued to generate earnings until the second retirement. Next, all payments, plus interest, made to the member between his first retirement and his return to state employment is calculated; these payments include the lump sum refund of the retired member's contribution, if one was made. The total of payments plus interest determines what is sometimes termed the "frozen present value debt." In the final step, this debt is deducted from the hypothetical present value that was calculated by assuming no retirement between the two periods of state service. This calculation produces the "thawed present value," *i.e.*, the value of the member's annuity benefit at the time of his second retirement.

On April 30, 2007, the State Employees' Retirement System (SERS) informed Heilbrunn that the "thawed present value" of his annuity benefit was \$371,732.58. This number included an actuarial adjustment of \$122,010.55, *i.e.*, the payments previously made to him plus interest. The interest represented the amount that would have been earned by the Fund had Heilbrunn never received the refund of his contribution or any monthly annuity payments. Notably, the 1994 amendments to the Retirement Code replaced the frozen present value of his first annuity of \$24,533.90 with a value of \$103,875.

The interest SERS applied to calculate his debt was compounded at the following rates: from May 15, 1986, to June 30, 1991: 5.5%; from July 1, 1991, to June 30, 1996: 9.9%; and from July 1, 1996, to June 30, 2007: 8.5%. These interest rates were adopted by the Retirement Board in consultation with its

actuarial consultant, the Hay Group, and represented the expected earnings on the Fund's assets during each five-year fiscal period of time.

At Heilbrunn's second retirement, he elected to receive a lump sum payment of \$44,111.98 and monthly payments of \$2,002.69. Because Heilbrunn disagreed with SERS' thawed frozen present value of his annuity benefit, he requested that it be recalculated. SERS denied his request, and Heilbrunn appealed to the Retirement Board.

The matter was assigned to a hearing examiner, who conducted a hearing on November 16, 2011. At the hearing, Heilbrunn and Joseph Torta, Director of the Bureau of Member Services with SERS, testified in Heilbrunn's case. SERS presented the testimony of Mark McGrath, its managing director of fixed income; William Truong, its senior investment analyst; and Brent Mowery, supervising actuary with the Hay Group.

On July 25, 2012, after receiving post-hearing briefs, the Hearing Examiner recommended that the Retirement Board deny Heilbrunn's request to recalculate the thawed frozen present value of his retirement annuity benefit. The Retirement Board adopted the Hearing Examiner's recommendation and denied Heilbrunn's request for a recalculation in an adjudication of February 24, 2014. Heilbrunn then petitioned for this Court's review.

On appeal,<sup>2</sup> Heilbrunn raises three issues. First, he contends that the interest used to calculate his frozen present value debt was improperly

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<sup>2</sup> When reviewing an agency adjudication, we determine whether the agency committed an error of law or violated the petitioner's constitutional rights and whether the agency's findings of fact are supported by substantial evidence. 2 Pa. C.S. §704; *Chuk v. State Employees' Retirement System*, 885 A.2d 605, 608 n.9 (Pa. Cmwlth. 2005). Our standard of review of factual findings is narrow and deferential, but on questions of law our review is plenary.

compounded. Second, Heilbrunn argues that the Retirement Board abused its discretion in choosing its assumed rate of return on its investments; Heilbrunn argues that it should have been 7.5% for all years in question. Third, Heilbrunn requests treble damages and attorney's fees under authority of the statute commonly known as the Loan Interest and Protection Law, Act of January 30, 1974, P.L. 13, *as amended*, 41 P.S. §§101 - 605. We address the issues *seriatim*.

### **Compounded Interest**

Heilbrunn contends that SERS lacked the statutory authority to use compounded interest in calculating his debt to the Fund upon his second retirement. He argues that interest can never be compounded without an “unequivocal contractual or statutory statement providing for compound interest.” Heilbrunn Brief at 25. According to exhibits prepared by Heilbrunn, using simple interest would have produced a “frozen present value debt,” or actuarial adjustment, much lower than SERS’ actuarial adjustment of \$122,010.55. For example, using the rates of return used by SERS, but without compounding them, yields a “frozen present value debt” of \$66,156.36.<sup>3</sup>

The Retirement Board maintains that because the statute requires interest to be computed in accordance with general actuarial principles, the legislature expressly authorized the use of compounded interest when establishing the thawed frozen present value of Heilbrunn’s annuity account.

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<sup>3</sup> The rates of return used by SERS, *i.e.*, the assumed rates established by the Retirement Board, were 5.5% for the period May 15, 1986, through June 30, 1991; 9.9% for the period July 1, 1991, through June 30, 1996; and 8.5% for the period July 1, 1996, through June 30, 2007.

Other exhibits produced by Heilbrunn illustrated even lower actuarial adjustments by using lower rates of return assumptions. For example, a rate of return assumption of 8.0% for the period of July 1, 1991, to June 30, 2007, would have resulted in an actuarial adjustment of \$62,414.27.

We begin with the statute that governs the calculation of the annuitant's debt to the Fund. Section 5706(c) of the Retirement Code states, in relevant part, as follows:

(c) Elimination of the effect of frozen present value.--

(1) An annuitant who returns to State service and earns three eligibility points by performing credited State service following the most recent period of receipt of an annuity under this part, or an annuitant who enters school service and:

(i) is a multiple service member; or

(ii) who elects multiple service membership, and earns three eligibility points by performing credited State service or credited school service following the most recent period of receipt of an annuity under this part, and who had the present value of his annuity frozen in accordance with subsection (a), *shall qualify to have the effect of the frozen present value resulting from all previous periods of retirement eliminated, provided that all payments under Option 4 and annuity payments payable during previous periods of retirement plus interest as set forth in paragraph (3) shall be returned to the fund in the form of an actuarial adjustment to his subsequent benefits or in such form as the board may otherwise direct.*

\* \* \*

(3) In addition to any other adjustment to the present value of the maximum single life annuity that a member may be entitled to receive that occurs as a result of any other provision of law, the

present value of the maximum single life annuity shall be reduced by all amounts paid or payable to him during all previous periods of retirement plus interest on these amounts until the date of subsequent retirement. *The interest for each year shall be calculated based upon the annual interest rate adopted for that fiscal year by the board for the calculation of the normal contribution rate pursuant to section 5508(b) (relating to actuarial cost method).*

71 Pa. C.S. §5706(c) (emphasis added). Section 5508(b) of the Retirement Code addresses the “normal contribution rate” of the employer and states as follows:

(b) Employer normal contribution rate.--*The employer normal contribution rate shall be determined after each actuarial valuation on the basis of an annual interest rate and such mortality and other tables as shall be adopted by the board in accordance with generally accepted actuarial principles.* The employer normal contribution rate shall be determined as a level percentage of the compensation of the average new active member, which percentage, if contributed on the basis of his prospective compensation through his entire period of active State service, would be sufficient to fund the liability for any prospective benefit payable to him in excess of that portion funded by his prospective member contributions, excluding shared-risk member contributions.

71 Pa. C.S. §5508(b) (emphasis added). In short, the “interest” to be added to the annuity payments made to the member during a prior retirement is the “annual interest rate adopted for that fiscal year by the [Retirement Board]” in which the member had been collecting an annuity. 71 Pa. C.S. §5706(c).

Heilbrunn notes that the term “compound interest” does not appear in either Sections 5706 or 5508. On this basis, he argues that the interest added to his annuity payments to establish his frozen present value debt should have been simple interest.

In support, Heilbrunn directs the Court to case law precedent. In *Powell v. Retirement Board of Allegheny County*, 246 A.2d 110 (Pa. 1968), for example, Powell was incarcerated for three years immediately before he retired. During his incarceration, he tried to make contributions to his retirement fund in order to remain eligible for retirement benefits upon release, but his contribution efforts were ignored. Upon his release, Powell applied for retirement benefits, but they were denied. On appeal, our Supreme Court held that the retiree was eligible for retirement benefits and with interest, but only simple interest. Our Supreme Court explained that

[i]t is fairly well established that the law in this Commonwealth frowns upon compound interest and as such will only permit compound interest on a debt when the parties have provided for it by agreement or a statute expressly authorizes it.

*Powell*, 246 A.2d at 115.

Heilbrunn also cites *Carroll v. City of Philadelphia, Board of Pensions and Retirement Municipal Pension Fund*, 735 A.2d 141 (Pa. Cmwlth. 1999). Carroll worked as an attorney for the Philadelphia District Attorney's office until January 29, 1987, when he resigned. When he retired, he qualified for "Plan J," a more generous retirement benefit package that required a higher employee contribution. However, the City had enacted an ordinance requiring that employees hired after the date Carroll was first hired would be enrolled in "Plan M," a less generous retirement benefit package with a lower employee contribution. On May 18, 1987, when Carroll returned to work for the District Attorney's office, he was mistakenly re-enrolled in Plan J. When Carroll retired, the City discovered the error and informed him that he was entitled to Plan M benefits. The City refunded his excess contributions with simple interest, and

Carroll sought compound interest, arguing that compound interest was the only way to make him whole. He reasoned that if the money had not been withheld, it would have been invested and earning compound interest. This Court denied his request because the applicable statute authorized only the “legal rate of interest.” *Id.* at 146. We stated, “[t]he legal rate of interest is simple interest and may not be compounded.” *Id.*

Finally, Heilbrunn directs us to *In re Mintz’ Trust*, 282 A.2d 295 (Pa. 1971), where a trust beneficiary objected to a loan made by the trustees to their affiliate. Because of their breach of fiduciary duty, the beneficiary demanded that the trustees pay back the loan amount with compound interest. Our Supreme Court held that the Fiduciaries Act of 1949 authorized interest “not exceeding the legal rate.” *Id.* at 304 (quoting section 754 of the Act of April 18, 1949, P.L. 512, art. VII, §754 (Repealed 1972), 20 P.S. §320.754). Accordingly, it could not order the payment of compound interest.

These cases are factually distinguishable because each involves the use of interest to calculate a type of damage award. *In re Mintz’ Trust* related to the imposition of damages upon trustees who had violated their fiduciary duty. *Carroll* involved a refund of a member’s excess contributions, and it construed the term “legal rate of interest” that appeared in the operative statute. *Powell* was a retirement case but, again, the purpose of the interest was to calculate a damage award against the employer that had improperly withheld a retirement benefit.

By contrast, here, we deal with a defined benefit retirement plan. The task is to determine the General Assembly’s definition of the retirement benefit of a member who has previously collected annuity payments and later returned to

state service. This determination is governed strictly by the language of the Retirement Code, and it has nothing to do with damages.

The Retirement Board contends that the Retirement Code authorizes the use of compounded interest on amounts it has paid to members who later return to the system. It explains that “[t]he compounded nature of the calculations is inherent and imbedded in the methodology of generally accepted actuarial practice, even if not expressly stated” in the statute. Retirement Board Brief at 37.

At the hearing, McGrath testified about the prevalence of compound interest in the actuarial industry. When asked if SERS uses a compound or simple interest rate, McGrath responded:

It’s a compound rate. And the reason it’s a compounded rate is that, you know, we’d be thinking about --- with investments, you know, you’re earning interest on interest is an important piece of what we have, so it’s an opportunity cost, and I kind of look at it this way. You know, as a fund we’re receiving cash flows, we’re receiving dividends, we’re receiving coupons and whatever. And with those distributions, it’s not like --- you know, they don’t always go out the door. You know, we earn money or lose money on those cash flows. So interest on interest is an important piece....

It’s compounded because it gets back to the opportunity cost, you know, because you get cash flows in an interest payment or a dividend payment, et cetera. You’re going to put the money to work, you know, so it would be compounded.

Reproduced Record at 183a-84a (R.R. \_\_\_\_). McGrath further testified that interest is “always compounded” in actuarial calculations. R.R. 286a-87a. Indeed, that evidence is unrebutted that a calculation made in accordance with “accepted actuarial principles” is one that compounds interest.

We agree with the Retirement Board’s conclusion that the rate of return assumptions made in accordance with generally accepted actuarial principles

must use compounded interest. The record established a ubiquitous use of compounded interest in actuarial calculations done to determine a rate of return on investments. Further, the legislature did not limit “interest” to “simple interest.” To the contrary, where the Retirement Code uses the term “statutory interest,” it specifically directs that interest be compounded annually. As the Hearing Examiner aptly observed in his proposed report,

[N]owhere in the [Retirement] Code does it reference a “legal rate of interest” or “simple interest”; instead, several definitions reference “statutory interest.” The [Retirement] Code then defines “statutory interest” as “[i]nterest at 4% per annum, **compounded annually.**” The [Retirement] Code also defines “valuation interest” as “[i]nterest at 5 ½% per annum **compounded annually** and applied to all accounts other than the members’ savings account.” Thus, it is more significant to note that the only interest rates discussed are compounded annually, as is the norm when dealing with these type of plans.

Hearing Examiner’s Opinion at 26 (citations omitted and emphasis in original) (adopted by the Retirement Board, Adjudication at 12).

We conclude that Section 5706(c)(3) of the Retirement Code authorized SERS’ use of compounded interest to calculate the amount of Heilbrunn’s frozen present value debt and, ultimately, the thawed frozen present value of Heilbrunn’s annuity benefit.

### **Interest Rate**

Heilbrunn next argues that the interest rates used by SERS were too high and should have been 7.5% for each year of his first retirement. According to Heilbrunn, 7.5% is the correct interest rate to apply because, in retrospect, it is now apparent that that is the rate of return the Fund needed to fully fund its obligations

to members.<sup>4</sup> Heilbrunn contends that the Retirement Board adopted an excessive interest rate so as to reduce the amount the employer would have to contribute.

The Retirement Board strongly rejects Heilbrunn's theory that the interest rate assumptions set by the Retirement Board were done to manipulate a lower contribution by the employer. Further, it explains that Heilbrunn's argument makes incorrect assumptions about the purpose of the employer contribution rate, which is not intended to fully fund SERS at the time of contribution. Rather, it is intended to fully fund the current employees' future retirement. The Retirement Board sums up Heilbrunn's argument as follows:

Heilbrunn essentially argues that whenever the investment return assumption is changed the [Retirement] Board should recalculate the retroactive and prospective benefits for all annuitants who retired with a "thawed" frozen present value calculation because in hindsight the interest rate assumption was "incorrect."

Retirement Board Brief at 31.

Again, we begin with the language of the Retirement Code. Section 5508(b) states:

(b) Employer normal contribution rate.--The employer normal contribution rate shall be determined after each actuarial valuation on the basis of an annual interest rate and such mortality and other tables as shall be adopted by the board in accordance with generally accepted actuarial principles. *The employer normal contribution rate shall be determined as a level percentage of the compensation of the average new active member, which percentage, if contributed on the basis of his prospective compensation through his entire period of active State service, would be sufficient to fund the liability for any*

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<sup>4</sup> Heilbrunn offered no exhibits to illustrate the impact upon his "frozen present value debt" of reducing the Retirement Board's assumed rates of return, but with compounding.

*prospective benefit payable to him in excess of that portion funded by his prospective member contributions, excluding shared-risk member contributions.*

71 Pa. C.S. §5508(b) (emphasis added). Because the employer's contribution is established as a reaction to anticipated return rates, SERS hires the Hay Group to conduct the actuarial investigations in order to anticipate what rates of return SERS can expect from its holdings. These anticipated rates of return are called "assumptions."

Actuaries can choose aggressive or conservative assumptions. The Hay Group considers its assumptions to be conservative. The Hay Group makes the following explanation of its view of conservatism in the beginning of each of its reports:

It is general practice to introduce some degree of conservatism in setting actuarial assumptions. However, the degree of conservatism varies widely among pension plans. Some plans set assumptions so that the pension plan contributions will be at least as great as the contributions needed in the most adverse foreseeable circumstances. Other systems set assumptions that are close to the actual experience but conservative enough to protect against small deviations from past experience. The latter, a moderately conservative approach, has been used by the SERS Board and the proposed rates in this evaluation were developed on that basis.

Certified Record (C.R.) Volume 6, Tab 12, *Fourteenth Investigation of Actuarial Experience of The State Employees' Retirement System of the Commonwealth of Pennsylvania: Experience from January 1, 1991 to December 31, 1995*, at 2. The degree of conservatism chosen by a pension means that an interest assumption may vary widely from pension plan to pension plan, even when all else is equal. For the period of time that Heilbrunn was first retired, and then retired again, the Hay

Group recommended the interest rates adopted by the Retirement Board that follow:

May 15, 1986, to June 30, 1991: 5.5% compounded annually

July 1, 1991, to June 30, 1996: 9.9% compounded annually

July 1, 1996, to June 30, 2007: 8.5% compounded annually

R.R. 389a. Heilbrunn argues that they were too high.

In support, Heilbrunn first cites a 2005 study done by Milliman Consultants and Actuaries, an independent actuarial firm, which reviewed SERS. According to the report, a return rate assumption of 8.0% “would represent a ‘best estimate’ assumption” while a 7.5% return rate assumption would be a “conservative” assumption. C.R. Vol. 4, Tab 5, *Actuarial Review of the Commonwealth of Pennsylvania State Employees’ Retirement System*, at 32. Despite this recommendation in 2005, the Retirement Board did not reduce its interest rate of 8.5% to 8.0% until April 29, 2009. See C.R. Vol. 4, Tab 7, Retirement Board Minutes, Wednesday April 29, 2009, at 2. It was not until 2011 that the interest rate fell to 7.5%, as recommended by Milliman. See C.R. Vol. 7, Tab 10, *2012-2013 Strategic Investment Plan*, at 2.

As further evidence that SERS’ interest assumptions were too aggressive, Heilbrunn cites a Pew Center report on Pennsylvania’s retirement systems. The report states that:

Pennsylvania assumes one of the highest rates of interest for its pension investments (8.5%) compared to the 50-state median of 8%. It also assumes relatively low inflation (3%). This means it is expecting the highest real rate of return (5.5%) of the 50 states. It uses a five-year smoothing period to calculate the actuarial value of assets, similar to the majority of states.

C.R. Vol. 4, Tab 8, at 12.

Finally, Heilbrunn notes that it is undisputed that SERS is underfunded. The Hay Group reported in 2012 that SERS has been underfunded since 2008. *See* C.R. Vol. 7, Tab 10, Heilbrunn's Post Hearing Reply Brief, attached, *2011 Actuarial Report: Defined Benefit Plan*, at 3. This is because, Heilbrunn reasons, SERS was too aggressive in setting its interest rate assumptions. Heilbrunn argues that he should not have to bear the economic brunt of overaggressive interest rates that were unsupported by market conditions.

The Retirement Board rejects Heilbrunn's argument that it chose actuarial assumptions in order to manipulate the employer contribution rate. The Retirement Board argues that the interest rate preferred by Heilbrunn, which was picked after-the-fact, is simply irrelevant. We agree.

Heilbrunn's reliance on the Milliman report is misplaced. As the introduction of the report states:

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions used in this report. It is certain that actual experience will not conform exactly to the assumptions used in this report. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

C.R. Vol. 4, Tab 5, *Actuarial Review of the Commonwealth of Pennsylvania State Employees' Retirement System*, at 2. That another actuarial firm reached different conclusions does not mean that the Hay Group and SERS purposefully manipulated SERS' interest assumptions. As Milliman acknowledges, different actuaries can be expected to reach different conclusions based on their different judgments and evaluation of the evidence. That Milliman would have used a

different interest rate does not mean that SERS manipulated its interest assumptions in order to lower the employer's contribution rate.

Heilbrunn's argument also ignores the evidence presented by SERS that its chosen rate of return fell between the expected investment returns of the S&P 500<sup>5</sup> and a portfolio of 60% stock and 40% bonds.<sup>6</sup> See C.R. Vol. 5, Tab 8, *Pennsylvania State Employees' Retirement System: Total Fund Investment Returns*. Compared to other states, SERS' return assumptions may have appeared "aggressive," but when compared to other indices, SERS' return assumptions appear conservative.

The Retirement Code places the responsibility upon the Retirement Board to adopt an annual assumed interest rate "in accordance with generally accepted actuarial principles." 71 Pa. C.S. §5508(b). To challenge the Retirement Board's assumed annual interest rates as not consistent with the Retirement Code, it was incumbent upon Heilbrunn to show defects in the actuarial methodology employed by the Hay Group. Heilbrunn offered no such evidence. On the other hand, the Retirement Board presented evidence at the hearing that its methodology was actuarially sound. While being questioned about the Hay Group's 2005 Section 5092(j) investigation, Mowery testified that the Hay Group follows actuarial principles called "actuarial standards of practice," or "ASOPs." R.R.

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<sup>5</sup> Truong testified before the hearing examiner that the S&P 500 is "the Standard and Poor's 500 of the largest in general U.S. companies that represent essentially, you know, the U.S. Stock Market that an institution and also a personal investor can purchase a fund that replicates the 500 companies." R.R. 259a.

<sup>6</sup> At the hearing, Truong testified that a 60/40 portfolio is "essentially an optimal fund where it's not as high in volatility as a pure stock index, but it's --- but it also is not as low return as just a straight bond" portfolio. R.R. 260a.

275a. According to Mowery, the Hay Group paid “attention to [its] ASOPs” when setting the Fund’s actuarial assumptions. R.R. 276a.

There is no evidence that the Retirement Board violated its statutory duty by not choosing a constant 7.5% interest rate for the period between Heilbrunn’s first and second retirement.<sup>7</sup>

### **Conclusion**

As noted by the Retirement Board, there are many reasons to explain the Retirement Fund’s so-called “underfunding,” *i.e.*, inadequate assets to cover all future benefits to all members. The Retirement Board notes that “underfunding” is principally a function of demographics and the reduction in benefit levels for new members, not its actuarial assumed rates of return. More to the point, the record shows that the Retirement Fund’s actual investment returns, on a compounded basis over all relevant time periods, exceeded the assumed rates of return for those periods. From July 1, 1986, to June 30, 2007, the annual return was 10.9%. The Retirement Board did not err in denying Heilbrunn’s request to recalculate the interest applied to the frozen present value of Heilbrunn’s pension annuity.

For these reasons, we affirm the order of the Retirement Board.

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MARY HANNAH LEAVITT, Judge

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<sup>7</sup> Because Heilbrunn has not prevailed on either of his appeal issues, we need not consider whether the Loan Interest and Protection Law allows damages and fees in the context of the Retirement Code.

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

|                             |   |                   |
|-----------------------------|---|-------------------|
| Allan H. Heilbrunn,         | : |                   |
| Petitioner                  | : |                   |
|                             | : |                   |
| v.                          | : | No. 454 C.D. 2014 |
|                             | : |                   |
| State Employees' Retirement | : |                   |
| Board,                      | : |                   |
| Respondent                  | : |                   |

**ORDER**

AND NOW, this 22<sup>nd</sup> day of January, 2015, the order of the State Employees' Retirement Board dated February 25, 2014 in the above-captioned matter is hereby AFFIRMED.

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MARY HANNAH LEAVITT, Judge