St. John's River Power Park System Employees' Retirement Plan

Actuarial Valuation as of October 1, 2019

ANNUAL EMPLOYER CONTRIBUTION

DETERMINED BY THIS VALUATION

IS TO BE PAID IN THE EMPLOYER FISCAL YEAR ENDING
SEPTEMBER 30, 2021

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March 13, 2020

JEA
The SJRPP Pension Committee

Dear Committee Members:

The results of the October 1, 2019 Annual Actuarial Valuation of the St. John's River Power Park System Employees' Retirement Plan (Plan) are presented in this report.

This report was prepared at the request of the St. John's River Power Park System and Jacksonville Electric Authority (SJRPP/JEA) and is intended for use by the Retirement Plan and those designated or approved by the Plan's Administrative Committee (Committee). This report may be provided to parties other than the Plan only in its entirety and only with the permission of the Committee. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the Plan's funding progress and to determine the employer contribution for the fiscal year ending September 30, 2021. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different. Disclosures for the Plan's financial statement under the GASB Statement Nos. 67 and 68 will be developed separately.

The computed contribution amount shown on page A-1 may be considered as a minimum contribution that complies with the Plan's funding policy. Users of this report should be aware that contributions made at that level do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the Plan in excess of those presented in this report be considered.

The contribution presented in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the Plan's financial condition.

The findings in this report are based on data or other information through September 30, 2019. The valuation was based upon information furnished by SJRPP/JEA concerning Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by SJRPP/JEA. In addition, this report was prepared using certain assumptions prescribed by the Board and prescribed

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by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Cost Method. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost Method section in accordance with F.S. 112.63 (1)(f). All actuarial assumptions used in this report are reasonable for purposes of this valuation.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the St. John's River Power Park System Employees' Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

James J. Rizzo and Piotr Krekora are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise considered in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Committee and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

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SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Closed Plan

The Plan was closed to new entrants during the year ended September 30, 2017 in conjunction with a closure of the St Johns River Power Plant. The number of active members declined rapidly during the decommissioning process with only very few active members left employed by JEA, the power plant's parent company. However, contributions are expected to be required even after the retirement of the last active member.

Comparison of Actuarially Determined Employer Contributions

The following is a comparison of required contributions developed in this year's and the last actuarial valuations:

	For FYE 9/30/2021 Based on 10/01/19 Valuation	For FYE 9/30/2020 Based on 10/01/18 Valuation	Increase (Decrease)
Actuarially Determined Contribution	$ 3,908,197	$ 17,174,846	$ (13,266,649)
Expected Employee Contribution	$ 7,136	$ 6,881	$ 255
Required Employer Contribution (If Made in Equal Bi-weekly Installments)	$ 3,901,061	$ 17,167,965	$ (13,266,904)
Credit Balance* Available at the Beginning of the Year	$ 0	12,205,496	$ (12,205,496)
Available Credit Balance Adjusted for Contribution Timing	$ 0	12,585,746	$ (12,585,746)
Minimum Cash Contribution After Application of Credit Balance	$ 3,901,061	$ 4,582,219 **	$ (681,158)

**Comments regarding the Credit Balance can be found on pages A-2 and B-4.*
**The employer contribution requirement for the year ending September 30, 2020 is assumed to be partially satisfied by application of the Credit Balance and with a deposit to the trust.*

Actuarially Determined Contribution

As presented in the preceding table, the contribution necessary for the fiscal year ending September 30, 2021 to support the current benefits for the St. John's River Power Park System Employees' Retirement Plan under the current funding objectives is $3,901,061, down from $17,167,965 for the fiscal year ending September 30, 2020. This contribution decrease resulted from a combination of the Plan's current funding policy, which included the objective of achieving a 100% funded ratio by October 1, 2019 and the change in the plan's mortality assumption. Please note that the Employer Contribution for the 2021 fiscal year is developed *assuming* it would be deposited in bi-weekly intervals throughout the year. Furthermore, it was assumed that all of the Credit Balance existing on the valuation date of October 1, 2019 would be used to satisfy portion of the contribution for the current year (FYE September 30, 2020).

Credit Balance

As directed by the representative of the Retirement Committee, a credit balance was established following a significant contribution made during fiscal year 2018 in excess of the required minimum. Under this approach, any excess contributions made by the employer are set aside to create a reserve that can be used to pay future contributions (referred to as "Credit Balance"). Any time there is a positive Credit Balance, amounts from that reserve can be applied toward payment of the employer's portion of the Actuarially Determined Contribution effectively lowering demand for cash from the employer's resources. As a trade-off, funds allocated to the Credit Balance cannot be recognized as assets in determination of the Unfunded Actuarial Accrued Liability used in developing the Actuarially Determined Contribution. For example, $12,205,496 of excess contributions remained on September 30, 2019. That amount (and projected interest earnings) will partially offset the $17,167,965 required contribution for the year ending September 30, 2020 (developed in the valuation as of October 1, 2018).

The Credit Balance is projected to be reduced to $0 by September 30, 2020 and the contribution required from JEA for the year ending September 30, 2021 in the amount of $3,901,061 will need to be made in full from JEA's resources. A numerical illustration can be found on page B-4.

St. John's River Power Park Closure

The St. John's River Power Park ("SJRPP" or "plant") was retired at the close of business on January 5, 2018. A small group of employees who continue working for JEA elected to maintain participation in the SJRPP System Employees' Retirement Plan and to continue accruing benefits under the Plan. All other benefit accruals are frozen with January 5, 2018 being the last day of employment for the remaining members and the Plan was closed for new members.

Contribution Volatility

The Required Employer Contribution is significantly lower than the previous year. This is a direct result of the current funding policy targeting elimination of the Unfunded Actuarial Accrued Liability by September 30, 2019. In absence of a replacement funding policy in place, all emerging experience and changes in assumptions will have immediate impact on the contribution requirements with a potential for dramatic changes from one year to the next.

Recommendations

For long-term planning purposes, it is recommended that the Committee (or JEA management) considers undertaking the process of designing a new funding policy, tailored around the long-term financial goals of the Plan Sponsor (JEA). The discussion should include scheduling periodic review of actuarial assumptions and methods used in the future valuations.

In order to adopt a new funding policy, the Committee may require input concerning actuarial risk management issues (simulations, stress-testing, asset smoothing, amortization policy, etc.)

Revisions in Benefits

There have been no revisions in benefits.

Revisions in Actuarial Assumptions and Methods

The Plan's mortality assumption is required by State statutes to be the same as used by the Florida Retirement System (FRS) in one of the two the most recent valuations. The mortality tables and improvement scales used by FRS were updated in their July 1, 2019 valuation. The new FRS mortality assumptions were adopted for this valuation. This change in mortality assumption decreased the Actuarial Accrued Liability by approximately $3 million. Please refer to page B-16 for more information regarding the mortality assumption.

One Plan

The Summary of Plan Provisions (Section E) describes two tiers of benefits. Some employees are entitled only to a monthly pension benefit, some are entitled only to a cash balance benefit, and others are entitled to both a frozen pension benefit and a cash balance benefit.

All assets of this Plan are intended to be available for the payment of all types of benefits. Plan assets constitute an undivided whole, without any allocation of assets to different employee groups or to different benefit structures. While this Plan has two different benefit structures, it is one plan.

Actuarial Experience

Actuarial gains occur in a year whenever the experience of the Plan is more favorable than was assumed. Conversely, there is an actuarial loss when the experience is worse than assumed. SJRPP plan experienced a loss during the year ending September 30, 2019 primarily due to less than favorable investment experience. The Plan's rate of return on the Actuarial Value of Assets (Market Value – Credit Balance) was 2.8%, falling short of the 6.0% return assumption. In addition, the demographic experience was less favorable than assumed resulting in an actuarial loss.

Analysis of Change in Employer Contribution

Although there was a net actuarial loss this year, the Net Employer Contribution is decreasing from the prior year resulting from a combination of various offsetting factors:

- The funding policy targeted elimination of the Unfunded Actuarial Accrued Liability (UAAL) by September 30, 2019. This goal resulted in increased contribution requirements in years leading to that date. The contribution amount determined in this actuarial valuation is primarily driven by the experience during the year ending September 30, 2019 with the net actuarial loss of $6.4 Million being fully recognized in the contribution for the year ending September 30, 2021.
- The change in assumed mortality rates decreased the Plan's UAAL by approximately $3 Million and this change is also fully recognized in the development of the contribution for the fiscal year 2021.

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

RISKS ASSOCIATED WITH THE MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The contribution rate shown on page A-1 may be considered as a minimum contribution rate that complies with the Board's funding policy, state statute, city ordinance, etc. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2019	2018	2017
Ratio of the market value of assets to total payroll	1.0*	1.0	1.0
Ratio of actuarial accrued liability to payroll	1.0*	1.1	1.1
Ratio of actives to retirees and beneficiaries	0.0	0.0	0.5
Ratio of net cash flow to market value of assets	-8.2%	3.7%	-2.7%

**For purposes of these measurements, we used a rough estimate of the total payroll for all JEA employees of $166,600,000.*

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

SECTION B

VALUATION RESULTS

PARTICIPANT DATA				
	October 1, 2019		October 1, 2018	
ACTIVE MEMBERS				
Number		5		5
Covered Annual Payroll	$	452,525	$	443,955
Average Annual Pay	$	90,505	$	88,791
Average Age		58.2		57.2
Average Past Service		25.3		24.3
Average Age at Hire		32.9		32.9
RETIREES & BENEFICIARIES				
Number		382		379
Annual Benefits	$	12,856,518	$	12,797,813
Average Annual Benefit	$	33,656	$	33,767
Average Age		68.0		67.2
TERMINATED VESTED MEMBERS				
Number		80		85
Annual Benefits	$	473,277	$	542,498
Average Annual Benefit	$	5,916	$	6,382
Average Age		51.1		50.6

ACTUARIALLY DETERMINED CONTRIBUTION (ADC)			
A. Valuation Date	October 1, 2019 *New FRS Mortality*	October 1, 2019 *Prior FRS Mortality*	October 1, 2018
B. ADC to Be Paid During Fiscal Year Ending	9/30/2021	9/30/2021	9/30/2020
C. Assumed Date(s) of Employer Contribution(s)	Bi-Weekly	Bi-Weekly	Bi-Weekly
D. Actuarially Determined Contribution (ADC)			
1. Total Normal Cost as of the Valuation Date	$ 132,675	$ 133,038	$ 103,673
2. Amount as of the Valuation Date to Amortize Unfunded Actuarial Liability by 10/1/2020	3,442,910	6,395,483	15,609,485
3. Interest Through Contribution Dates	332,612	607,304	1,461,688
4. Total ADC as of the Contribution Dates	3,908,197	7,135,825	17,174,846
5. Estimated Employee Contributions made as of the Contribution Dates	(7,136)	(7,134)	(6,881)
6. Net Employer Contribution	$ 3,901,061	$ 7,128,691	$ 17,167,965
7. Net Contribution as % of Expected Covered Payroll	2,186.63 %	3,997.02 %	9,980.21 %
E. Expected Covered Payroll for the Contribution Year	178,405	178,350	172,020

Note: The remaining Unfunded Accrued Liability is expected to be paid off by the actuarially determined contribution for the year ending September 30, 2020. Should that contribution be confirmed, the amortization payment component of the total contribution can be revised to $0 and the Actuarially Determined Contribution would be adjusted accordingly.

CALCULATION OF NORMAL COST			
A. Valuation Date	October 1, 2019 *New FRS Mortality*	October 1, 2019 *Prior FRS Mortality*	October 1, 2018
B. Total (Employer/Employee) Normal Cost as of the Valuation Date for:			
1. Active Members' Benefits			
a. Service Retirement Benefits	$ 18,874	$19,073	$ 31,255
b. Termination Benefits	1,807	1,871	2,572
c. Disability Benefits	325	307	487
d. Preretirement Death Benefits	448	566	859
f. Total	21,454	21,817	35,173
2. Administrative Expenses	111,221	111,221	68,500
3. Total (Employer/Employee) Normal Cost as of the Valuation Date	132,675	133,038	103,673

Derivation of Amortization Payment for the Contribution Year		
		After Assumption Changes
1.	UAAL As of October 1, 2019	$ 19,999,449
2.	Normal Cost	132,675
	Expected Employee Contributions	(7,134)
	Employer Normal Cost	125,541
3.	Expected Employer Contribution*	17,167,965
4.	Interest at the assumed rate:	
	a. on 1 for one year	1,199,967
	b. on 2 for one year	7,532
	c. on 3 from dates paid	515,039
	d. a + b - c	692,460
5.	Expected UAAL at September 30, 2020 1 + 2 - 3 + 4d	3,649,485
6.	Projected UAAL Discounted to the Valuation Date	3,442,910

** Contribution determined in the October 1, 2018 Valuation for the year ending September 30, 2020 and partially satisfied by application of the available Credit Balance.*

CREDIT BALANCE ACCOUNT		
A. Credit Balance for Contribution Year Ending September 30, 2019		
1. Credit Balance at October 1, 2018		**$19,695,050**
2. Additions		
a) Excess Contributions		
i. Actuarially Determined Contribution (ADC)	8,422,270	
ii. Contributions Made	0	
iii. Excess Contributions Made (ii - i), not less than 0	0	
b) Total Additions		**0**
3. Deductions		
a) Credit Balance applied to ADC		
i. Actuarially Determined Contribution (ADC)	8,422,270	
ii. Amount Available	20,277,295	
iii. Credit Balance applied to ADC, lesser of i and ii	8,422,270	
b) Waived Credit Balance	0	
c) Total Deductions		**8,422,270**
4. Interest		
a) Interest rate	6.0%	
b) Interest Credited		932,715
5. Credit Balance at September 30, 2019 (1 + 2b - 3c + 4b)		**$12,205,496**
B. Projected Credit Balance for Contribution Year Ending September 30, 2020		
1. Credit Balance at October 1, 2019		**$12,205,496**
2. Additions		
a) Excess Contributions		
i. Actuarially Determined Contribution (ADC)	17,167,965	
ii. Contributions Made	4,582,219	
iii. Excess Contributions Made (ii - i), not less than 0	0	
b) Total Additions		**0**
3. Deductions		
a) Credit Balance applied to ADC		
i. Actuarially Determined Contribution (ADC)	17,167,965	
ii. Amount Available (adjusted for interest)	12,585,746	
iii. Credit Balance applied to ADC, lesser of i and ii	12,585,746	
b) Waived Credit Balance	0	
c) Total Deductions		**12,585,746**
4. Interest		
a) Interest rate	6.0%	
b) Interest Credited (Charged)		380,250
5. Credit Balance at September 30, 2020 (1 + 2b - 3c + 4b)		**$0**

ACTUARIAL VALUE OF BENEFITS AND ASSETS			
A. Valuation Date	October 1, 2019 *New FRS Mortality*	October 1, 2019 *Prior FRS Mortality*	October 1, 2018
B. Actuarial Present Value of All Projected Benefits for			
1. Active Members			
a. Service Retirement Benefits	$ 2,867,197	$2,904,516	$2,759,891
b. Termination Benefits	7,392	7,593	8,649
c. Disability Benefits	10,516	10,134	11,751
d. Preretirement Death Benefits	13,444	17,581	21,409
f. Total	2,898,549	2,939,824	2,801,700
2. Inactive Members			
a. Retirees & Beneficiaries	161,791,703	164,587,006	166,153,254
c. Terminated Vested Members	5,260,099	5,377,483	5,877,150
d. Total	167,051,802	169,964,489	172,030,404
3. Total for All Members	169,950,351	172,904,313	174,832,104
C. Actuarial Accrued (Past Service) Liability	169,806,566	172,759,139	174,666,326
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	169,770,137	172,723,507	174,598,991
E. Plan Assets			
1. Market Value	162,012,613	162,012,613	170,664,780
2. Credit Balance	12,205,496	12,205,496	19,695,050
3. Actuarial Value (1 -2)	149,807,117	149,807,117	150,969,730
F. Actuarial Present Value of Projected Covered Payroll	2,081,728	2,074,618	2,206,688
G. Actuarial Present Value of Projected Member Contributions	83,269	82,985	88,268

The purpose of this Section of the Report is to provide certain measures which indicate the financial soundness of the program. These measures relate to short term solvency and long-term solvency.

The various percentages listed in this Section as of a single valuation date are not significant by themselves. What is significant, however, is the trend of the rates over a period of years. It is also important to keep in mind that each time benefits or assumptions are revised; the value of actuarial liabilities are created or diminished. Any newly created liabilities are financed systematically over a period of future years. All actuarially computed values in this analysis are based on the actuarial assumptions utilized in the respective years' actuarial valuations.

Short Term Solvency

The ultimate test of financial soundness is the program's ability to pay all promised benefits when due. The program's progress in accumulating assets to pay all promised benefits can be measured by comparing the market value of assets with:

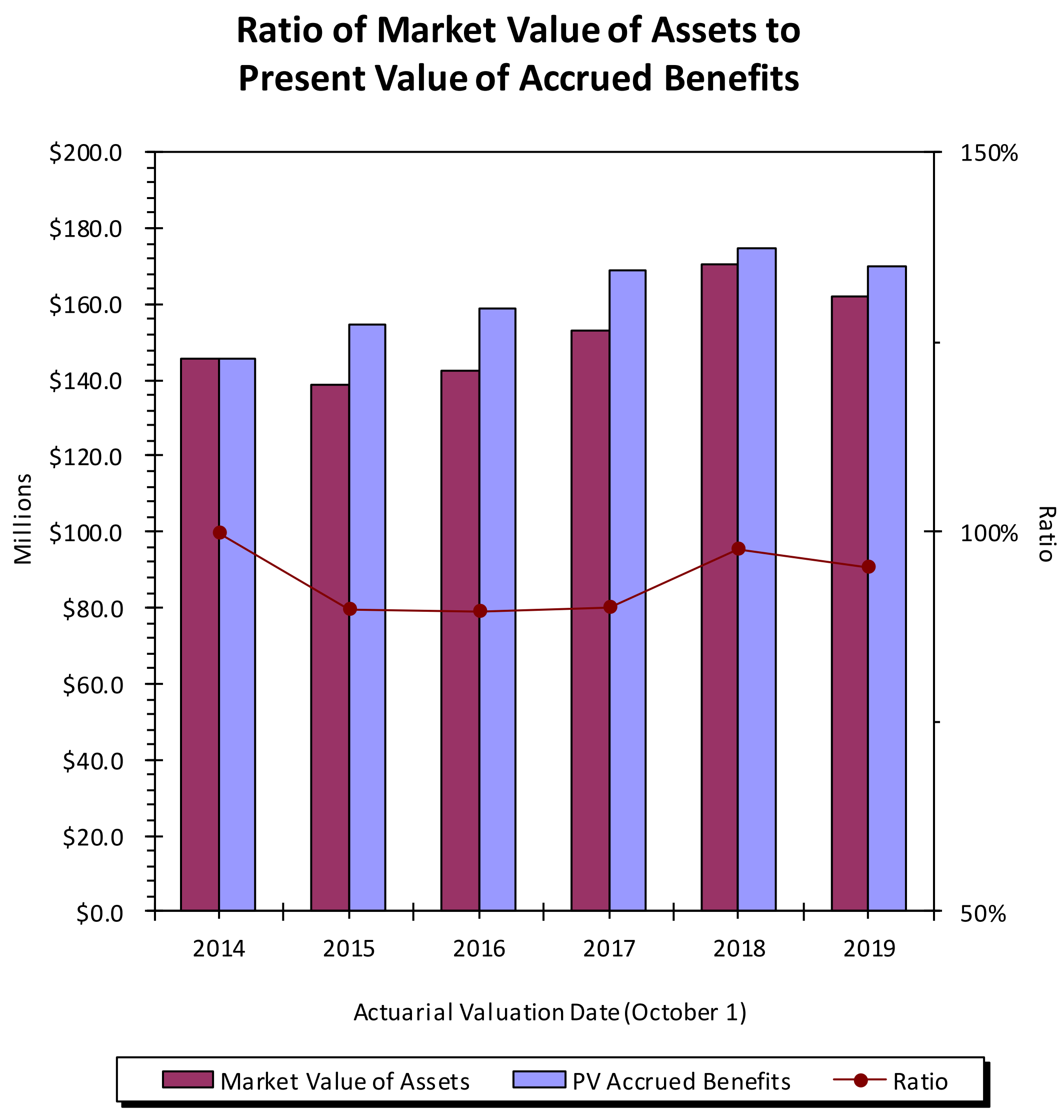
1. The actuarial present value of projected benefits payable to those already receiving benefits and to vested terminations, and

2. The actuarial present value of accrued benefits payable to active participants. This amount is based on benefits earned to date without future credited service or salary increases.

The total of the two items should generally be fully covered by assets. That portion of the total of the two items covered by assets should increase over time assuming an ongoing plan. Often assets continue to grow beyond the actuarial present value of these two items.

Retroactive increases in benefits will, of course, adversely affect the trend in the years when such increases are first reflected in the actuarial values. Although different actuarial assumptions would be used in the event of a termination of the program, this test shows how much of the benefits accrued to date might be covered by assets in the event of a Plan freeze using the valuation assumptions.

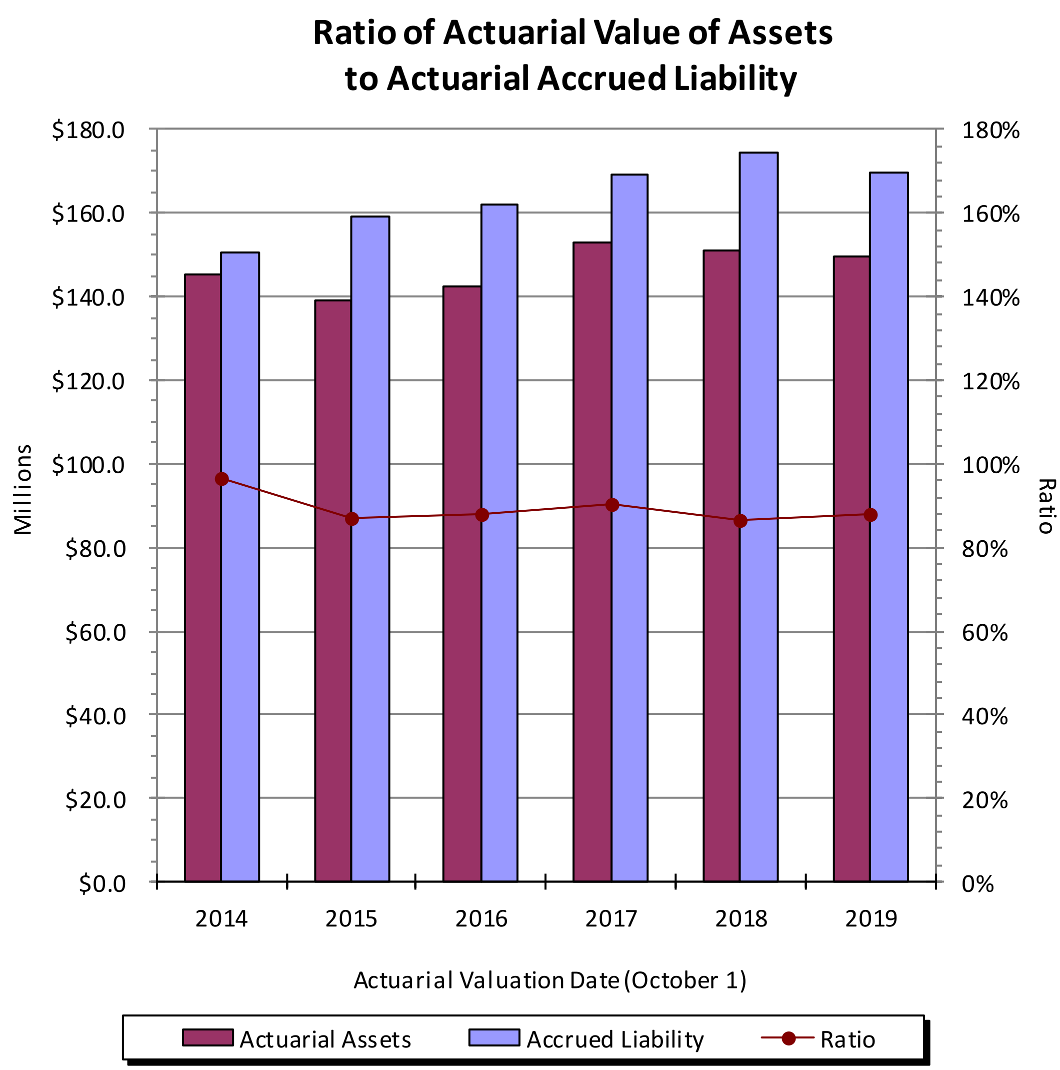
	Power Park System Employees		
	10/1/2019	10/01/18	10/01/17
1. Accumulated Contributions of Active Members	$ 253,066	$ 215,473	$ 1,837,408
2. APV of Projected Benefits in Pay Status and for Vested Terminations	167,051,802	172,030,404	125,692,691
3. APV of Accrued Benefits for Active Participants (Employer Portion)	2,465,269	2,353,114	41,572,821
4. Total	169,770,137	174,598,991	169,102,920
5. Market Value of Assets	162,012,613	170,664,780	152,797,764
6. Assets as % of Total	95 %	98 %	90 %



Long Term Solvency

Over the longer term, the solvency of an ongoing Plan can be measured by comparing the Actuarial Value of Assets to an amount known as the Actuarial Accrued Liability (AAL) under the Entry Age Actuarial Cost Method. This item has often been called the "past service liability". Its derivation differs from the short-term solvency value derivation in several ways. The short-term solvency liability number is based on the benefits accrued to date by the participants while the long-term solvency liability number is based on the normal costs accrued to date by the employer. As in the case of the short-term solvency values, the AAL is affected immediately by any revisions in benefits or assumptions. The accumulation of assets to equal or exceed the AAL can be considered a long-range funding goal.

Valuation Date	Actuarial Value of Assets (in Thousands)	Actuarial Accrued Liability (in Thousands)	% of AAL Covered by Assets
10/1/09	$ 73,884	$ 113,512	65 %
10/1/10	91,975	120,940	76
10/1/11	96,511	143,203	67
10/1/12	115,815	140,281	83
10/1/13	135,019	146,521	92
10/1/14	145,425	150,494	97
10/1/15	138,902	159,261	87
10/1/16	142,285	162,029	88
10/1/17	152,798	169,321	90
10/1/18	150,970	174,666	86
10/1/19	149,807	169,807	88



ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long-term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) for the past year is computed as follows:

Derivation of Experience Gain (Loss)			
1.	Last Year's UAAL	$	23,696,596
2.	Last Year's Normal Cost		103,673
	Last Year's Expected Employee Contributions		6,881
	Last Year's Employer Normal Cost		96,792
3.	Last Year's Actual Employer Contribution		8,422,270
4.	Interest at the assumed rate:		
	a. on 1 for one year		1,421,796
	b. on 2 for one year		5,808
	c. on 3 from dates paid		252,668
	d. a + b - c		1,174,936
5.	This Year's Expected UAAL 1 + 2 - 3 + 4d		16,546,054
6.	This Year's Actual UAAL (before any changes in benefits or assumptions)		22,952,022
7.	Net Actuarial Gain (Loss): (5) - (6)		(6,405,968)

Gain (Loss) by Source		
1.	Gain (Loss) due to investments	(5,236,118)
2.	Gain (Loss) due to other sources	(1,169,850)
3.	Total Gain (Loss): (1) + (2)	(6,405,968)

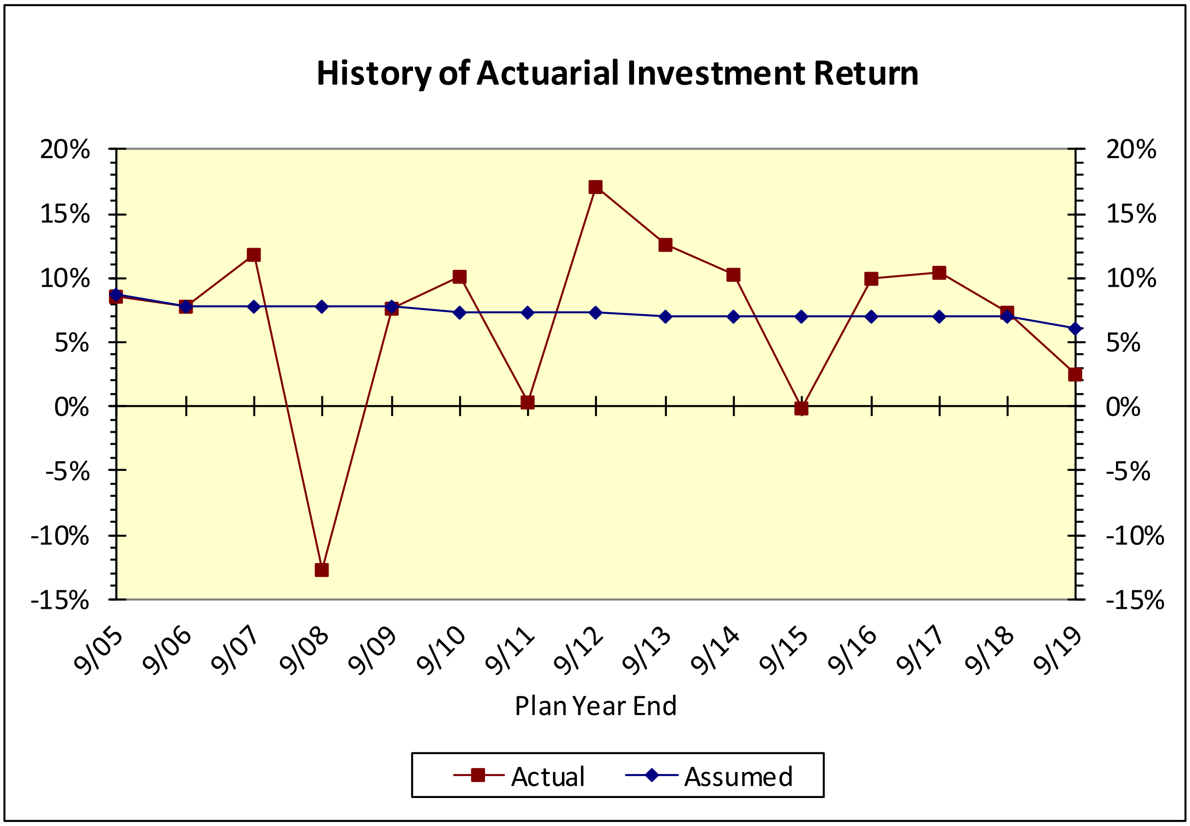
Net actuarial gains in previous years have been as follows:

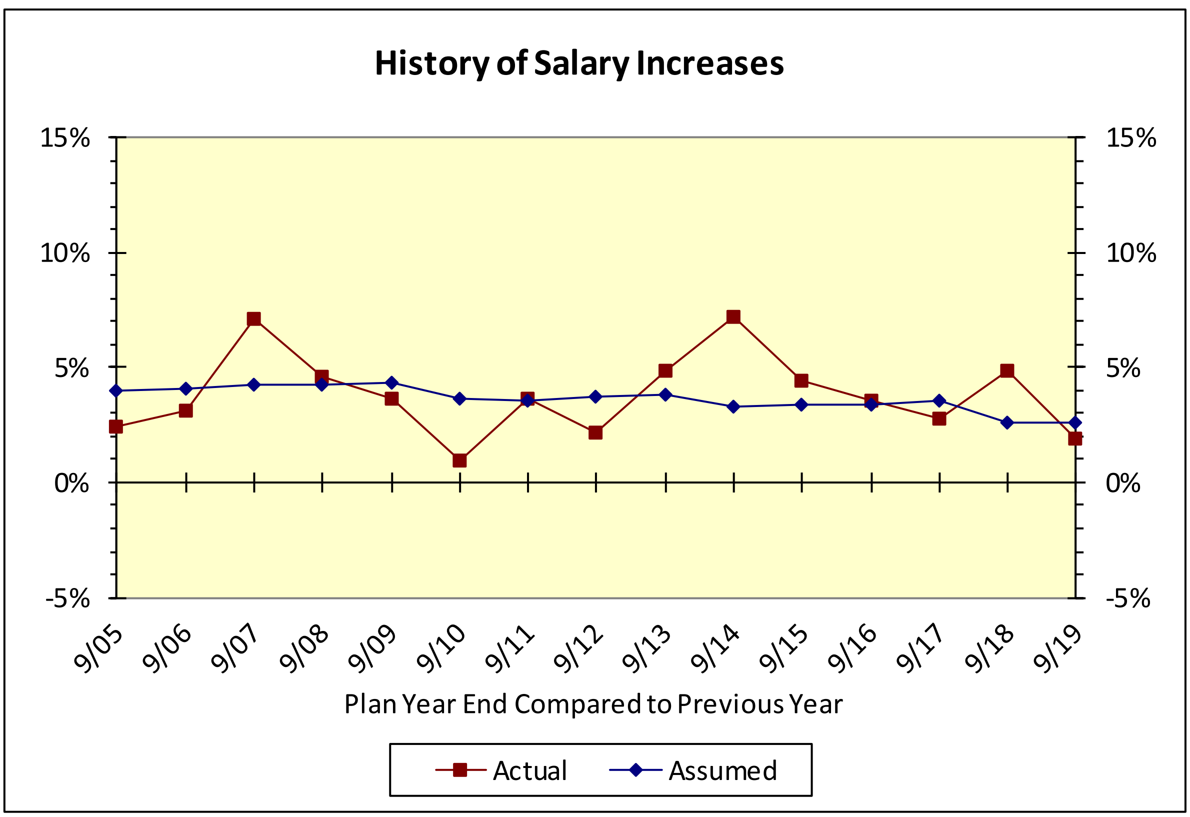
Year Ended	Actuarial Gain (Loss)	Cumulative Gain (Loss)
9/30/2010	$ (1,058,645)	$
9/30/2011	(12,002,660)	(13,061,305)
9/30/2012	12,570,367	(490,938)
9/30/2013	3,388,019	2,897,081
9/30/2014	2,313,420	5,210,501
9/30/2015	(14,280,756)	(9,070,255)
9/30/2016	465,572	(8,604,683)
9/30/2017	(3,190,784)	(11,795,467)
9/30/2018	2,271,106	(9,524,361)
9/30/2019	(6,405,968)	(15,930,329)

The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the history of actuarial fund earnings and salary increase rates compared to the assumed rates:

Year Ending	Actuarial Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
9/30/2005	8.59 %	8.75 %	2.39 %	4.02 %
9/30/2006	7.77	7.75	3.15	4.09
9/30/2007	11.89	7.75	7.08	4.29
9/30/2008	(12.67)	7.75	4.63	4.29
9/30/2009	7.60	7.75	3.62	4.38
9/30/2010	10.14	7.25	0.98	3.66
9/30/2011	0.41	7.25	3.65	3.57
9/30/2012	17.17	7.25	2.20	3.76
9/30/2013	12.64	7.00	4.90	3.79
9/30/2014	10.32	7.00	7.19	3.29
9/30/2015	(0.19)	7.00	4.47	3.38
9/30/2016	9.99	7.00	3.52	3.40
9/30/2017	10.39	7.00	2.76	3.55
9/30/2018	7.37	7.00	4.91	2.59
9/30/2019	2.48	6.00	1.93	2.59
Average	6.69 %	7.30 %	3.81 %	3.64 %

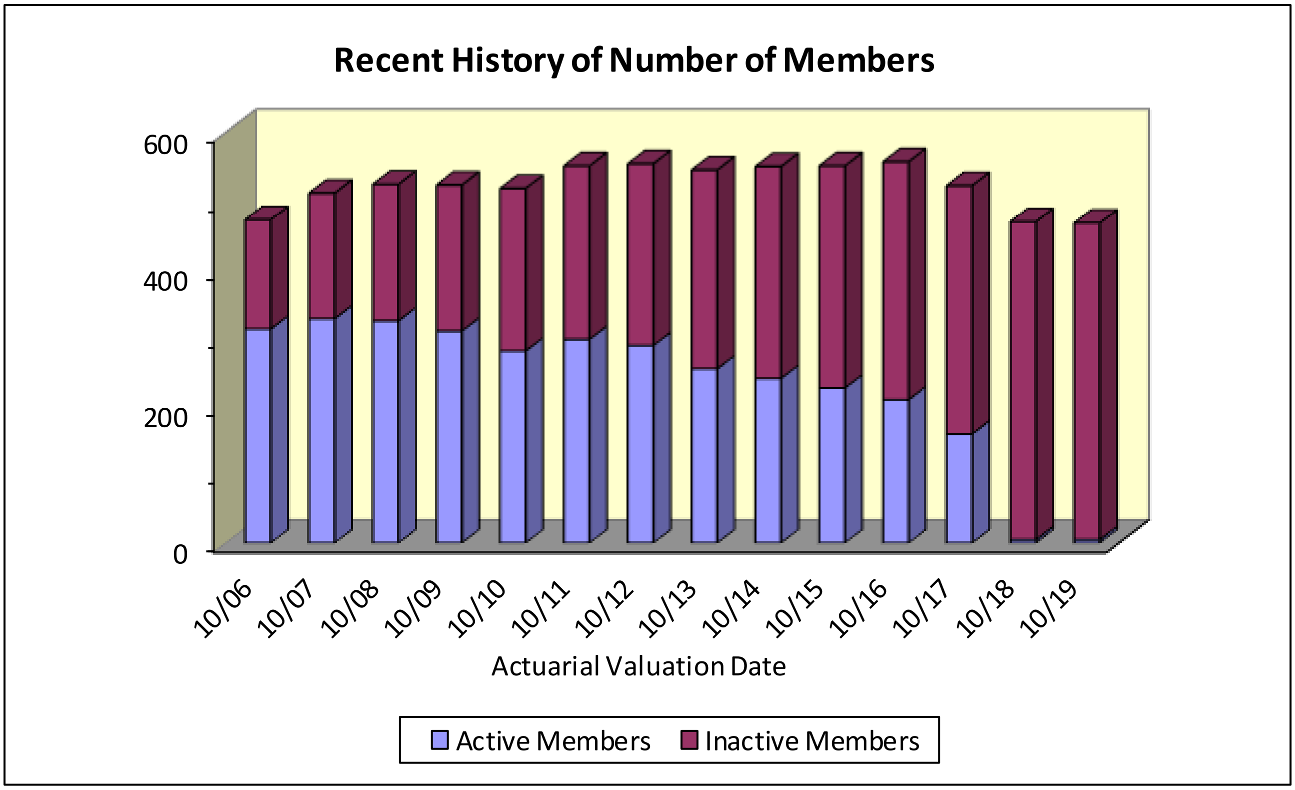
The actuarial investment return rates shown above are based on the actuarial value of assets, which has been the same as fair market value since at least 2007 (and possibly earlier). The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.

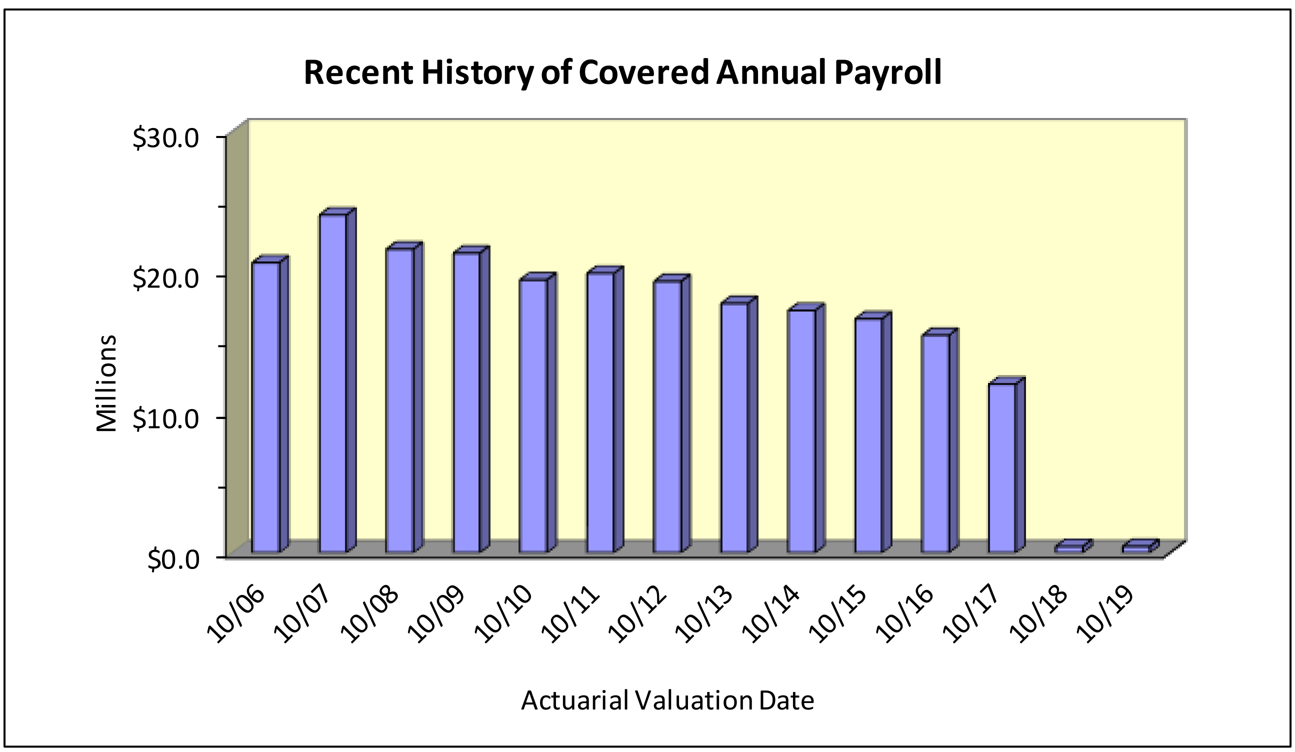

History of Actuarial Investment Return
20%
15%
10%
5%
0%
-5%
-10%
-15%
9/05
9/06
9/07
9/08
9/09
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
Plan Year End
Actual
Assumed


History of Salary Increases
15%
10%
5%
0%
-5%
9/05
9/06
9/07
9/08
9/09
9/10
9/11
9/12
9/13
9/14
9/15
9/16
9/17
9/18
9/19
Plan Year End Compared to Previous Year
Actual
Assumed

Valuation Date	Number of Active Members	Number of Inactive Members	Reported Annual Payroll (in Thousands)	Actuarial Value of Assets (in Thousands)	UAAL (in Thousands)	Total Normal Cost Amount (in Thousands)	Total Normal Cost % of Payroll
10/1/06	312	160	20,648	51,498	35,035	2,004	9.7 %
10/1/07	327	184	24,027	61,029	34,995	2,252	9.4
10/1/08	324	200	21,609	60,998	47,680	2,222	10.3
10/1/09	309	214	21,327	73,884	39,628	2,277	10.7
10/1/10	280	238	19,431	91,975	28,966	2,470	12.7
10/1/11	297	254	19,895	96,511	46,692	2,418	12.2
10/1/12	288	266	19,318	115,815	24,466	1,718	8.9
10/1/13	254	291	17,761	135,019	11,502	1,611	9.1
10/1/14	240	310	17,254	145,425	5,069	1,420	8.2
10/1/15	226	325	16,665	138,902	20,360	1,257	7.5
10/1/16	209	348	15,489	142,285	19,743	1,113	7.2
10/1/17	159	363	11,988	152,798	16,523	178	1.5
10/1/18	5	464	444	150,970	23,697	104	23.4
10/1/19	5	462	453	149,807	19,999	133	29.3

Table: RECENT HISTORY OF VALUATION RESULTS


Recent History of Number of Members
600
400
200
0
10/06
10/07
10/08
10/09
10/10
10/11
10/12
10/13
10/14
10/15
10/16
10/17
10/18
10/19
Actuarial Valuation Date
Active Members
Inactive Members


Recent History of Covered Annual Payroll
$30.0
$20.0
$10.0
$0.0
Millions
10/06
10/07
10/08
10/09
10/10
10/11
10/12
10/13
10/14
10/15
10/16
10/17
10/18
10/19
Actuarial Valuation Date

RECENT HISTORY OF ACTUARIALLY DETERMINED AND ACTUAL CONTRIBUTIONS				
Valuation	End of Year To Which Valuation Applies	Actuarially Determined Contributions		Actual Contributions
		Employer Portion	% of Expected Payroll	
10/1/05	9/30/07	$ 4,181,312	18.35 %	$ 4,305,105
10/1/06	9/30/08	10,044,998	46.89	10,080,963
10/1/07	9/30/09	10,238,757	48.54	10,398,136
10/1/08	9/30/10	13,452,946	60.01	13,565,335
10/1/09	9/30/11	8,919,354	40.31	9,027,932
10/1/10	9/30/12	7,995,205	41.15	8,005,178
10/1/11	9/30/13	11,845,434	56.96	11,884,513
10/1/12	9/30/14	5,396,838	26.72	5,558,821
10/1/13	9/30/15	3,413,998	18.39	3,508,587
10/1/14	9/30/16	2,049,942	11.37	2,142,182
10/1/15	9/30/17	7,967,400	45.74	8,039,385
10/1/16	9/30/18	7,727,453	47.73	26,408,861 *
10/1/17	9/30/19	8,422,270	763.56	8,422,270 **
10/1/18	9/30/20	17,167,965	9980.21	TBD
10/1/19	9/30/21	3,901,061	2186.63	TBD

* CY 2018 contributions in excess of the Actuarially Determined Contribution of $7,727,453 were used to establish a Credit Balance that can be used to satisfy contribution required for CY 2019.

** CY 2019 contribution was fully satisfied by using a portion of the Credit Balance. As of October 1, 2019 the credit balance adjusted for interest was $12,205,496 and was available to partially satisfy contribution requirements for CT 2020.

Valuation Methods

Actuarial Cost Method - The actuarial cost method is a procedure for allocating the actuarial present value of benefits and expenses to time periods. Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using the **Individual Entry Age Actuarial Cost Method**. The entry age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry age of the member and the estimated active status exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability.

Financing of Unfunded Actuarial Accrued Liabilities - The unfunded actuarial accrued liability is financed as a level dollar.

A goal-oriented amortization schedule was applied in this valuation. It was designed to pay off the Unfunded Actuarial Accrued Liability by October 1, 2019. The goal is to set the amortization schedule for the current and next few years so as to expect the Plan assets (including all employer contributions scheduled to be made) as of October 1, 2019 to be equal to the expected Actuarial Accrued Liability derived in an open group projection for the October 1, 2019 actuarial valuation. These two numbers are certain not to be equal on that date. However, the amortization schedule for the next two years is designed to aim at achieving that goal on the basis of best estimates.

Actuarial Value of Assets - The Market Value of Plan assets. Beginning with the October 1, 2018 Valuation, Actuarial Value of Assets is reduced for a value of the Credit Balance.

Valuation Assumptions

The actuarial assumptions used in the valuation are shown in this Section. Several of the assumptions used in this valuation have been adopted by the SJRPP Pension Committee as recommended in in the actuarial assumptions review report dated March 4, 2013. These recommendations were based on the demographic experience from 2004 through 2012 and economic forecasts available at the time the report was issued.

Economic Assumptions

The investment return rate assumed in the valuation is 6.00% per year, compounded annually (net of investment expenses).

The ***wage inflation rate*** assumed in this valuation is 3.0% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects applicable to individuals. The ***price inflation rate*** assumed in this valuation is 2.5% per year.

The rates of salary increases (including price inflation) used in the valuation are illustrated in the following tables.

Annual Rates of Salary Increase

Years of Service	Assumed Increase
0-1	12.50%
2	7.50%
3	5.50%
4	4.50%
5-6	3.50%
7-9	3.00%
10-14	2.75%
15+	2.50%

Demographic Assumptions

Rates of mortality are the same rates used by the Florida Retirement System for its July 1, 2019 actuarial valuation. All tables listed below are PUB-2010 base tables with the generational mortality using gender-specific MP-2018 mortality improvement projection scale and 2010 as the base year.

Healthy Active Mortality (During Employment) Rates:
Female, Non-Disabled: Headcount Weighted General Below Median Employee Female Table
Male, Non-Disabled: Headcount Weighted General Below Median Employee Male Table, set back 1 year

Healthy Inactive Mortality (Post-Employment) Rates:
Female, Non-Disabled: Headcount Weighted General Below Median Healthy Retiree Female Table
Male, Non-Disabled: Headcount Weighted General Below Median Healthy Retiree Male Table, set back 1 year

Disabled Inactive Mortality Rates
Female, Disabled: Headcount Weighted General Disabled Retiree Female Table, set forward 3 years
Male, Disabled: Headcount Weighted General Disabled Retiree Male Table, set forward 3 years

These rates are used by the Florida Retirement System and are mandated by the State Statutes to be implemented for funding valuations no later than 2020. This assumption is used to measure probabilities of each benefit payment being made after retirement. Rates of mortality after retirement are based on tables for healthy annuitants. All deaths before retirement are assumed to be non-service connected.

The rates of retirement are used to measure the probability of eligible members retiring under normal retirement eligibility during the next year were as follows:

Rates of Retirement	
Year of Eligibility	Retirement Rates
0 - 0.999	20.0%
1 - 1.999	17.5%
2 - 2.999	15.0%
3 - 3.999	13.0%
4 - 4.999	11.0%
5 +	10.0%

Employees are assumed to retire no later than upon attaining age 70.

There is no separate assumption for electing Tier 1 partial lump sum distributions as these are deemed to be actuarially equivalent to underlying annuity payments. All Tier Two (cash balance accounts) benefits are assumed to be paid in a lump sum upon termination of employment.

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability).

Rates of Separating from Active Employment			
Service	Regardless of Age	Sample Ages	5+ Years of Service
0 - 0.999	13.00%	25	5.60%
1 - 1.999	11.00%	30	4.30%
2 - 2.999	9.00%	35	3.00%
3 - 3.999	7.00%	40	2.20%
4 - 4.999	5.00%	45	1.40%
		50	0.95%
		55	0.50%

Rates of disability among active members (0% of disabilities are assumed to be service-connected).

Percent Becoming Disabled Within Next Year		
Sample Ages	Men	Women
25	0.022%	0.013%
30	0.031%	0.026%
35	0.040%	0.039%
40	0.066%	0.063%
45	0.092%	0.087%
50	0.168%	0.151%
55	0.243%	0.215%

Miscellaneous and Technical Assumptions

Administrative & Investment Expenses	Annual administrative expenses assumption is based on the actual expenses paid during the preceding fiscal year, but reduced for one-time expenses. Investment expenses are offset against gross investment income. Assumed administrative expenses are added to the Normal Cost.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
Decrement Operation	Disability and mortality decrements do not operate during the first 5 years of service. Disability and separation do not operate during retirement eligibility.
Decrement Timing	Decrements of all types are assumed to occur at mid-year.
Eligibility Testing	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Forfeitures	Vested members who terminate with a benefit worth less than 100% of their own accumulated contributions were assumed to forfeit their vested benefit.
Incidence of Contributions	Employer contributions are assumed to be received in 12 equal monthly installments, unless otherwise specified. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Marriage Assumption	75% of members are assumed to be married for purposes of death-in-service benefits and retirement benefits. Male spouses are assumed to be three years older than female participants and female spouses are assumed to be three years younger than male participants for active member valuation purposes.
Normal Form of Benefit	The normal form of benefit is 75% Joint and Survivor Annuity.
Pay Increase Timing	Beginning of fiscal year. This is equivalent to assuming that reported pays represent the actual amount paid during the previous fiscal year.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.

Actuarial Accrued Liability	Actuarial Accrued Liability is the actuarial present value of projected future benefits that are attributable to an employees' service to date. Sometimes it is expressed as the difference between the actuarial present value of all future benefit payments and the actuarial present value of future normal costs.
Accrued Benefit	For the Tier 1 benefits, the accrued benefit is calculated according to a formula described in the Summary of Plan Provisions using service and salary history through the valuation date. For a Tier 2 benefits, the accrued benefit is a hypothetical account balance with interest reflecting pay history through the valuation date.
Accrued Service	The service credited under the Plan which was rendered before the date of the actuarial valuation.
Actuarial Assumptions	These are factors for estimating expected future experience with respect to occurrences of mortality, disability, turnover, retirement, rates of investment income and salary increases, etc.
Actuarial Cost Method	This is a mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefit payments" between future normal costs and actuarial accrued liabilities. It is often referred to as the "Actuarial Funding Method" or "Actuarial Valuation Cost Method".
Actuarial Equivalent	A single amount or series of amounts of equal present value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the Plan.
Actuarial Present Value	Actuarial Present Value of a series of payments (or a single payment) is the amount of funds currently required to provide those payments in the future. This amount is determined by discounting future payments at predetermined rates of interest, taking into account the probability of payment. It is also referred to as "Present Value."
Amortization	Amortization is a process of paying off, or recognizing, an interest-discounted amount with periodic payments of interest and principal, (similar to paying off an installment loan) -- as opposed to paying it off with a single sum.
Experience Gain (Loss)	A measure of the difference between actual experience and expected experience based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Normal Cost	Normal Cost is the actuarial cost of a portion of projected future benefits allocated to the current year by the actuarial cost method. It is sometimes referred to as "Current Service Cost."
Reserve Account	An account used to indicate that funds have been set aside for a specific purpose and is not generally available for other uses.
Unfunded Actuarial Accrued Liability	UAAL is the difference between actuarial accrued liability and the actuarial value of Plan assets.
Valuation Assets	The value of current Plan assets recognized for valuation purposes. Sometimes based on market value plus a portion of unrealized appreciation or depreciation.

SECTION C

PENSION FUND INFORMATION

SUMMARY OF ASSETS		
	9/30/2019	**9/30/2018**
Cash and Securities - Market Value		
Cash and Cash Equivalents	$ 2,370,042	$ 10,791,925
US Government Bonds & Notes	64,406,745	59,500,517
Corporate Bonds	0	0
Mortgage/Asset-Backed Securities	0	0
Common & Preferred Stocks	48,561,291	50,496,133
Mutual Funds	45,997,485	49,515,619
Other Securities	124,565	0
Total	161,460,128	170,304,194
Receivables and Accruals		
Member Contribution	138,311	210,372
Employer Contribution	0	0
Interest and Dividends	453,065	439,598
Due from Brokers	18,910	84,445
Total	610,286	734,415
Payables		
Due to Revenue Fund	0	0
Due to Brokers	57,801	373,829
Total	57,801	373,829
Net Assets - Market Value	$ 162,012,613	$ 170,664,780

PENSION FUND INCOME AND DISBURSEMENTS		
	Year Ending 9/30/2019	**Year Ending 9/30/2018**
Market Value at Beginning of Period	$ 170,664,780	$ 152,797,764
Income		
Member Contributions	90,149	232,360
Employer Contribution	0	26,408,861
Interest and Dividends	3,097,431	2,894,813
Realized and Unrealized Gain (Loss)	1,990,718	9,075,991
Total Income	5,178,298	38,612,025
Disbursements		
Benefit Payments (including Lump Sums)	13,197,971	19,927,907
Investment Related Expenses	478,553	471,821
Other Administrative Expenses	153,941	345,281
Total Disbursements	13,830,465	20,745,009
Net Increase During Period	$ (8,652,167)	$ 17,867,016
Market Value at End of Period	$ 162,012,613	$ 170,664,780

The investment rate of return has been calculated on the Market Value basis: interest, dividends, realized gains (losses) and unrealized appreciation (depreciation) divided by the beginning market value of the fund, adjusted for cash flow during the year. This figure is normally called the Total Rate of Return.

Year Ended	Investment Rate of Return Market Value Basis
9/30/05	8.59 %
9/30/06	7.77
9/30/07	11.89
9/30/08	(12.67)
9/30/09	7.60
9/30/10	10.14
9/30/11	0.41
9/30/12	17.17
9/30/13	12.64
9/30/14	10.32
9/30/15	(0.19)
9/30/16	9.99
9/30/17	10.39
9/30/18	7.37
9/30/19	2.81
Average Compounded Rate of Return for	
5 Years	5.99 %
All Years	6.71 %

SECTION D

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA*	From 10/01/18 To 10/01/19	From 10/01/17 To 10/01/18
A. Active Members		
1. Number Included in Last Valuation	5	159
2. New Members Included in Current Valuation	0	0
3. Non-Vested Employment Terminations	0	0
4. Vested Employment Terminations	0	(49)
5. Service Retirements	0	(68)
6. Disability Retirements	0	0
7. Deaths	0	0
8. Lump Sums paid out	0	(37)
9. Number Included in This Valuation	5	5
B. Terminated Vested Members		
1. Number Included in Last Valuation	85	54
2. Additions from Active Members	0	49
3. Lump Sum Payments/Withdrawals	(1)	(11)
4. Payments Commenced	(3)	(7)
5. Deaths Resulting in New Survivor Benefits	(1)	0
6. Other	0	0
7. Number Included in This Valuation	80	85
C. Service Retirees, Disability Retirees, Alt Payees & Beneficiaries		
1. Number Included in Last Valuation	379	309
2. Additions from Active Members	0	68
3. Additions from Terminated Vested Members	3	7
4. Deaths Resulting in No Further Payments	(3)	(7)
5. Deaths Resulting in New Survivor Benefits	(4)	0
6. New Survivor Benefit	5	0
7. End of Certain Period - No Further Payments	0	0
8. Other -- Data Adjustment	2 *	2
9. Number Included in This Valuation	382	379

**Two Survivors not included in 2018 data.*

STATISTICAL DATA

Active Members as of October 1, 2019

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Totals
Under 25	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-
40-44	-	-	1	-	-	-	-	1
45-49	-	-	-	-	-	-	-	-
50-54	-	-	1	-	-	-	-	1
55-59	-	-	-	-	-	-	1	1
60-64	-	-	-	-	-	-	1	1
65&UP	-	-	-	-	-	-	1	1
TOTALS	-	-	2	-	-	-	3	5

Inactive Members as of October 1, 2019

Age Group	Retirees and Survivors	Avg. Annual Benefit	Terminated Vested	Avg. Annual Benefit
Under 45	1	3,977	22	102
45-49	0	0	6	1,654
50-54	9	50,042	22	7,439
55-59	41	35,379	11	4,876
60-64	83	39,319	17	13,702
65-69	102	34,467	2	5,452
70-74	93	31,710	0	0
75-79	30	28,520	0	0
80-84	14	20,872	0	0
85&UP	9	8,404	0	0
TOT	382	33,656	80	5,916

SECTION E

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Governing Document

Plan established by the St. John's River Power Park System and was most recently amended and restated pursuant to Amendments No. 6 through 11 and a restated plan document, adopted effective October 1, 2015. The Plan is also governed by certain provisions of the Internal Revenue Code and Florida law.

B. Effective Date

The original effective date is October 1, 1984. More recently, the Plan was amended and restated effective October 1, 2015.

C. Plan Year

October 1 through September 30

D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

E. Eligibility Requirements

Employees who are actively working for SJRPP are eligible to participate (excluding temporary employees, contract employees, and employees represented by a collective bargaining agent unless the bargaining agent and the Plan Sponsor agree that such represented employees will be eligible to participate). Additionally, employees whose employment was transferred from SJRPP to JEA and who elected to continue participating in the Plan instead of the City of Jacksonville General Employees' Pension Plan, or employees who transferred from JEA to SJRPP and elected to participate in this Plan, are eligible to participate. Eligible employees' participation begins on the first day of the employees' regular (not temporary or contract) employment with SJRPP. Reemployed former participants participate immediately, provided they satisfy these eligibility conditions upon rehire.

The Plan consists of two tiers of benefits. Tier One is the traditional pension tier, while Tier Two is the cash balance tier of benefits. For purposes of determining eligibility for each tier of benefits, employees participating in the Plan are classified as Group A, B, C, or D employees.

Group A Employees – A Group A employee is an employee who as of February 24, 2013 had:

(1) reached age sixty (60) with five (5) years of service, or
(2) attained age fifty-five (55) with twenty (20) years of service, or
(3) completed thirty (30) years of service regardless of age.

Tier One Benefits may continue to be accrued by Group A employees. Tier Two Benefits may not be accrued by Group A employees.

Group B Employees – An Employee who does not meet the definition of a Group A employee but who had completed twenty (20) years of service as of February 24, 2013 and was less than fifty-five (55) years of age as of that date, is referred to as a "Group B employee." Group B employees continue to accrue Tier One Benefits. However, Group B employee are not eligible to select the BACKDROP distribution option. Tier Two Benefits may not be accrued by Group B employees.

Group C Employees – A Participant who accrued Tier One Benefits in the Plan prior to February 25, 2013, but who does not meet the definition of a Group A or Group B Employee is a Group C employee. Effective February 25, 2013, the Tier One Benefits of Group C employees were frozen. Group C Employees became eligible to accrue Tier Two Benefits effective February 25, 2013.

Group D Employees – A Participant who is newly hired or rehired on or after February 25, 2013. Group D employees are only eligible to accrue Tier Two Benefits.

F. Vesting/Benefit Service

The total number of years of employment determined as of each employment anniversary date in which a participant works at least 1000 hours. An employee may purchase service credit for years of prior service as a temporary, contract or co-op employee in which 1000 hours of employment were earned by paying an amount equal to the then applicable employee contribution rate times Earnings as of the date of purchase. An employee may also elect to purchase up to a maximum of two years of Vesting Service for time spent performing active military service.

For transfers from JEA to SJRPP who elect to participate in this Plan, Vesting Service and Benefit Service accrue only for periods of employment with SJRPP. For transfers from SJRPP to JEA who elect to join the City's Plan, Benefit Service, Vesting Service, and Final Average Earnings are frozen under this Plan at the date of transfer.

G. Earnings

Monthly base salary as of the last day of the month coincident with or next preceding termination of employment, excluding bonuses, overtime, expense allowances, severance pay or other extra forms of remuneration.

H. Social Security Average Wages

The average of the maximum amount of annual earnings subject to Social Security tax for the 35 years preceding the Social Security Normal Retirement Age, determined according to the table in effect at termination of employment.

I. Final Average Earnings (FAE)

The annual average of a participant's Earnings over the highest 36 consecutive complete months out of the last 120 months of participation, or during all complete months of participation if less than 120, immediately preceding his/her retirement date, termination date, or date of death, whichever is earliest.

J. Normal Retirement

Eligibility: A participant may retire on the first day of the month coincident with or next following the earlier of:

(1) age 65 with 5 years of Vesting Service, or
(2) age 55 with 20 years of Vesting Service, or
(3) 30 years of Vesting Service regardless of age.

As a result of the plant shut down announced March 17, 2017, all employees age 55 actively employed on the plant shutdown date are eligible to retire immediately regardless of the accrued service without a benefit reduction.

Tier One Benefit: 2.0% of FAE multiplied by years of Benefit Service not to exceed 15 years; plus 2.4% of FAE multiplied by years of Benefit Service in excess of 15 years, but not to exceed 30 years; plus 0.65% of the excess of FAE over the Social Security Average Wages multiplied by years of Benefit Service, not to exceed 35 years and reduced by 1/144 for each of the first 36 months and 1/288 for each of the next 84 months by which the Normal Retirement date precedes age 65.

Normal Form of Tier One Benefit: For a married participant, 75% Joint & Survivor Annuity; for an unmarried participant, annual annuity payable for life that is the actuarial equivalent of a 75% Joint & Survivor Annuity; other options are also available.

Benefits are payable bi-weekly.

COLA: For participants retired on or after October 1, 2003 and applicable to Tier One Benefits only; 1.0% annual increase each year beginning with the first benefit payment coincident with or next following the fifth anniversary of retirement.

Tier Two Benefit: Employees receive annual pay credits to their Cash Balance accounts in the amount of 6.0% of Earnings between February 25, 2013 and September 30, 2015 and 8.5% of Earnings on or after October 1, 2015. Cash Balance Accounts shall be credited with interest at the rate of 4% per year.

Form of Benefit: Benefits may be distributed as a lump sum, by rollover in accordance with the Internal Revenue Code or as an annuity, at the election of the Participant

K. Early Retirement

Eligibility: A participant may elect to retire prior to becoming eligible for Normal Retirement, upon attainment of age 55 with 10, but less than 20, years of Vesting Service.

Tier One Benefit: All three components of the Tier One Benefit are reduced by 1/144 for each of the first 36 months and 1/288 for each of the next 84 months by which the Early Retirement date precedes age 65.

Normal Form of
Tier One Benefit: For a married participant, 75% Joint & Survivor Annuity; for an unmarried participant, annual annuity payable for life that is the actuarial equivalent of a 75% Joint & Survivor Annuity; other options are also available.

Benefits are payable bi-weekly.

COLA: For participants retired on or after October 1, 2003 and applicable to Tier One Benefits only; 1.0% annual increase each year beginning with the first benefit payment coincident with or next following the fifth anniversary of retirement.

Tier Two Benefit: Equal to the Cash Balance Account balance at time of retirement. Same Normal Form of Benefit as Tier One. Additional distribution options are available, including 100% lump sum distribution.

L. Delayed Retirement

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.

M. Disability (duty or non-duty related)

Eligibility: Any participant who has met the requirements for Early Retirement and becomes totally and permanently disabled is immediately eligible for a disability benefit.

Benefit: Same as Early Retirement, taking into account compensation earned and service credited until the date of disability. Tier One benefit is reduced for Early Retirement.

Normal Form of
Tier One Benefit: Same as for Normal Retirement.

N. Death Benefit (duty or non-duty related)

Eligibility: The eligible spouse of a participant who dies after the completion of 5 or more years of Vesting Service but prior to the commencement of benefits, is eligible for survivor benefits. The beneficiary of a participant with less than 5 years of Vesting Service will receive a refund of the participant's accumulated contributions.

Benefit: For a vested Active Participant who dies *prior* to his/her Earliest Retirement Age and prior to retirement, the eligible spouse's survivor benefit is determined as though the participant (i) terminated employment on the date of death, (ii) survived and worked to the participant's Earliest Retirement Age, (iii) retired at Earliest Retirement Age with a 75% Joint & Survivor Annuity, and (iv) died on the following day, but the Early Payment Reduction is applied as if the participant had reached Normal Retirement Date.

For a vested Terminated Participant who dies *prior* to his/her Earliest Retirement Age and prior to retirement, the eligible spouse's survivor benefit is determined as though the participant (i) survived to the participant's Earliest Retirement Age, (iii) retired at Earliest Retirement Age with a 75% Joint & Survivor Annuity, and (iii) died on the following day.

For a vested participant (active or terminated) who dies *after* his/her Earliest Retirement Age and prior to retirement, the eligible spouse's survivor benefit is determined as if the participant had retired with a 75% Joint & Survivor Annuity on the day before the participant's date of death.

Benefit Payments: Payable bi-weekly beginning on the first day of the month following or coincident with the participant's Earliest Retirement Age. The eligible spouse may elect to defer commencement of benefits.

Post Retirement Death

Benefit determined by the form of benefit elected by the participant upon retirement.

O. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are the Life Annuity option, the 10 Year Certain and Life Annuity option, or the 50%, 66 2/3% or 100% Joint and Survivor Annuity options.

Retirees also have the option of electing a partial lump sum up to 15% of the actuarial present value of their accrued benefit, with the remaining value of benefits to be paid according to one of the other annuity options elected by the retiree. Retirees who elect this option cannot elect BACKDROP.

For Tier One benefits, retirees can elect a lump-sum, if the actuarial equivalent of the accrued benefit is not greater than $10,000.

For Tier Two benefits, retirees can elect a lump-sum.

P. Termination Benefit (Vesting)

Eligibility: A participant has earned a non-forfeitable right to Plan benefits after the completion of 5 years of Vesting Service.

Benefit: The benefit is the participant's accrued benefit as of the date of termination and is payable on the first day of the month coincident with or next following the date the participant reaches age 65. Participants with 10 or more years of Vesting Service can elect to take a reduced Early Retirement benefit on or after age 55.
As a result of the plant shutdown, members actively employed on the shutdown date but not eligible for immediate retirement, may be eligible for subsidized early retirement benefit beginning at age 55. Such members with 10 or more years of service on the shutdown date are eligible for a benefit equal to 88% of the accrued benefit, all other members are eligible for a benefit equal to 78% of the accrued benefit beginning at age 55.

Participants with less than 5 years of Vesting Service will receive a refund of the member's accumulated contributions.
As a result of the plant shutdown, members actively employed on the shutdown announcement date (March 17, 2017) became fully vested in their accrued benefits.

Normal Form of Tier One Benefit: Same as for Normal Retirement.

Q. Refunds

Eligibility: All participants terminating employment with less than 5 years of Vesting Service are eligible to have their participant contributions returned to them upon separation from service. Vested participants (those with 5 or more years of Vesting Service) or their beneficiaries may also elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the participant's contributions.

R. Participant Contributions

4.0% of Earnings paid by SJRPP under the "employer pick-up" provisions of IRC Section 414(h).

S. Employer Contributions

Any additional amount determined by the actuary needed to fund the Plan properly according to State and Federal laws.

T. Cost of Living Increases

For participants retired on or after October 1, 2003 and applicable to Tier One Benefits only; 1.0% annual increase beginning with the first benefit payment coincident with or next following the fifth anniversary of retirement.

U. Changes from Previous Valuation

There were no changes in the plan provisions, however there were plan provisions triggered by the plant shutdown, see page A-2 of the Valuation Report.

V. 13th Check

Not Applicable

W. BACKDROP

Eligibility: Group A employees who have worked beyond their Normal Retirement Date are eligible to elect BACKDROP. Group B, C, and D employees are not eligible.

Benefit: Retirement benefits are calculated as if the retiree elected to retire up to 5 years earlier. Benefit is based upon the FAE and Benefit Service as of the beginning of the BACKDROP period. In addition, the participant receives a lump sum amount equal to the accumulation of the retirement benefits that the participant would have received over the BACKDROP period plus interest.

Maximum BACKDROP Period: 60 months

Interest Credited: Each year interest is credited or debited to the BACKDROP based upon the Plan's Actuarial rate of return for that year. Rate is guaranteed to be no less than (4.0%) and no more than 4.0% per annum.

Normal Form of Benefit: The BACKDROP component is paid in a lump sum. The Normal Form of the retirement benefit is the same as under Normal Retirement.

COLA: For participants retired on or after October 1, 2003; 1.0% annual increase beginning with the first benefit payment coincident with or next following the fifth anniversary of the participant's actual retirement date (not 5 years after the beginning date for the BACKDROP period).

X. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a St. John's River Power Park System Employees' Retirement liability if continued beyond the availability of funding by the current funding source.

Section F

Comparative Summary of Principal Valuation Results

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2019	October 1, 2018
A. Participant Data		
Number Included:		
Actives	5	5
Service Retirees & Beneficiaries	382	379
Disability Retirees	0	0
Terminated Vested Members	80	85
Total Members and Beneficiaries	467	469
Total Annual Payroll	$452,525	$443,955
Annual Valuation Payroll	452,525	443,955
Expected Annual Payroll in Contribution Year	178,405	172,020
Total Annualized Benefits		
Retirees & Beneficiaries	12,856,518	12,797,813
Terminated Vested Members	473,277	542,498
B. Assets (Market Value)		
Cash and Cash Equivalents	$ 2,370,042	$ 10,791,925
US Government Bonds & Notes	64,406,745	59,500,517
Corporate Bonds	-	-
Mortgage/Asset-Backed Securities	-	-
Common & Preferred Stocks	48,685,856	50,496,133
Mutual Funds	45,997,485	49,515,619
Net Receivables & Payables	552,485	360,586
Total	162,012,613	170,664,780
Credit Balance	12,205,496	19,695,050
Actuarial Value	149,807,117	150,969,730
Assets include:		
Accumulated active member contributions (with interest if applicable)	253,066	215,473
C. Actuarial present value of accrued benefits		
(i) Vested accrued benefits		
Retired members and benefitciaries	161,791,703	166,153,254
Terminated members	5,260,099	5,877,150
Active members (includes non-forfeitable members contributions of 253,066 and 215,473)	2,718,335	2,568,587
Total	169,770,137	174,598,991
(ii) Non-vested accrued benefits	0	0
(iii) Total actuarial p.v. of accrued benefits	169,770,137	174,598,991
(iv) Actuarial p.v. of accrued benefits at begin. of year	174,598,991	169,102,920
(v) Changes attributable to:		
Amendments	0	0
Assumption change	(2,953,370)	15,792,907
Operation of decrements	11,322,487	9,631,071
Benefit payments	(13,197,971)	(19,927,907)
Other	none	none
(vi) Net change (PVAB measurement Method Change)	(4,828,854)	5,496,071
(vii) Actuarial p.v. of accr. benefits at end of year	169,770,137	174,598,991

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2019	October 1, 2018
C. Liabilities- Actuarial Present Value of Future Benefits		
1. Active Members		
Service Retirement Benefits	$2,867,197	$2,759,891
Termination Benefits	7,392	8,649
Disability Benefits	10,516	11,751
Preretirement Death Benefits	13,444	21,409
Total Actives	2,898,549	2,801,700
2. Inactive Members		
Service Retirees & Beneficiaries	161,791,703	166,153,254
Terminated Vested Members	5,260,099	5,877,150
Total Inactive Members	167,051,802	172,030,404
3. Total Present Value for All Members	169,950,351	174,832,104
Total Present Value of:		
Future Salaries	2,081,728	2,206,688
Future Employee Contributions	83,269	88,268
Future Contributions from Other Sources	20,059,965	23,774,107
Derivation of Current Employer Unfunded Actuarial Accrued Liability (UAAL)		
a. Total UAAL for Prior Valuation Date	$4,001,546	$16,523,221
b. Employer Normal Cost for this period	96,792	133,970
c. Interest acccrued on (a) and (b)	245,900	1,166,003
d. Contributions for this period	8,422,270	26,408,861
e. Interest accrued on (d)	262,387	924,310
f. Changes due to:		
Plan Amendment	0	0
Assumption Changes	(2,952,573)	15,782,629
Asset Method	0	0
Actuarial (Gain) Loss	6,405,968	(2,271,106)
g. Total Current UAAL: a+b+c-d-e+f	(887,024)	4,001,546

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2019	October 1, 2018
D. Pension Cost		
Entry Age Normal Cost for:		
Service Retirement Benefits	$18,874	$31,255
Vesting Benefits	1,807	2,572
Disability Benefits	325	487
Preretirement Death Benefits	448	859
Total Actives	21,454	35,173
Administrative Expenses	111,221	68,500
Total Normal Cost	132,675	103,673
Payment Required to Amortize Unfunded Actuarial Accrued Liability	3,442,910	15,609,485
Total Contribution at Valuation Date (EE + ER)	3,575,585	15,713,158
Employer Contribution Adjusted for Frequency of Payments and Interest to Next Following Fiscal Year	3,901,061	17,167,965
% of Expected Payroll	2186.63%	9980.21%
Amount Expected to be Contributed by Members Next FY	7,136	6,881
% of Expected Payroll	4.00%	4.00%
E. Past Contributions- For the Fiscal Years Ended September 30 of 2018 and 2019		
Required Contribution Determined in the Valuation as of	October 1, 2017	October 1, 2016
by the Plan Sponsor	$8,422,270	$7,727,453
by Members	$44,121	$647,661
Actual Contribution for the Fiscal Year ended	9/30/2019	9/30/2018
by the Plan Sponsor	-	$26,408,861
by Members	90,149	$232,360
F. Net experience (gain) loss during year:	$6,405,968	($2,271,106)

G. 1. Plan to Amortize Unfunded Actuarial Accrued Liability

Payments determined to fully amortize all of the Unfunded Actuarial Accrued Liability by October 1, 2019.

2. Schedule Illustrating the Amortization of the Unfunded Actuarial Accrued Liability (UAAL)

Year	Projected UAAL
2019 (peak)	$19,999,449
2020	$3,649,485
2021	$0
2022	$0
2023	$0
2024	$0

3. Action taken since last actuarial valuation.
Contribution sufficient to satisfy the total required contribution.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

H. 1. Three-Year Comparison of Actual and Assumed Salary Increases (Annualized)

Year Ended	Actual	Assumed
9/30/2019	1.9%	2.6%
9/30/2018	4.9%	2.6%
9/30/2017	2.8%	3.6%

2. Three-Year Comparison of Investment Return (Actuarial Value)

Year Ended	Actual	Assumed
9/30/2019	2.48%	6.00%
9/30/2018	7.37%	7.00%
9/30/2017	10.39%	7.00%

3. Average Annual Growth in Payroll, Last Ten Years (if applicable)

Valuation Date	Total Payroll
9/30/2009	21,327,140
9/30/2010	19,430,971
9/30/2011	19,895,174
9/30/2012	19,318,374
9/30/2013	17,761,203
9/30/2014	17,253,952
9/30/2015	16,664,648
9/30/2016	15,489,302
9/30/2017	11,988,122
9/30/2018	443,955
9/30/2019	452,525
Total % Increase Last Ten Years	-97.88%
Annual % Increase	-31.97%
Thirty-year Forecast	N/A

I. Benefits and Expenses of Plan not Explicitly or Implicitly Provided in Valuation

NONE

J. Trends not taken into Account but which are likely to Result in Future Cost Increases

NONE