

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

Actuarial Valuation as of October 1, 2021



ANNUAL EMPLOYER CONTRIBUTION
DETERMINED BY THIS VALUATION
IS TO BE PAID IN THE EMPLOYER FISCAL YEAR ENDING
SEPTEMBER 30, 2023





May 4, 2022

JEA
The SJRPP Pension Committee

Dear Committee Members:

The results of the October 1, 2021 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 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, 2023. 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, 2021. 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.

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

This report was prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. Certain elements of the valuation process had been performed using our proprietary model and related software which in our professional judgment have the capability to provide results that are consistent with the purposes of this measurement. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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.



The SJRPP Pension Committee

May 4, 2022

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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, 2018 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 owner. 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 9/30/2023 Based on 10/01/21 Valuation	For FYE 9/30/2022 Based on 10/01/20 Valuation	Increase (Decrease)
Actuarially Determined Contribution	\$ 116,299	\$ 3,384,898	\$ (3,268,599)
Expected Employee Contribution	\$ 7,469	\$ 10,468	\$ (2,999)
Required Employer Contribution (If Made in Equal Bi-weekly Installments)	\$ 108,830	\$ 3,374,430	\$ (3,265,600)
Credit Balance* Available at the Beginning of the Contribution Year	\$ 2,350,989	5,490,393	\$ (3,139,404)
Available Credit Balance Adjusted for Contribution Timing	\$ 2,424,232	5,661,441	\$ (3,237,209)
Minimum Cash Contribution After Application of Credit Balance	\$ 0	\$ 0	\$ 0

**Comments regarding the Credit Balance can be found on pages A-2 and B-4.*

Actuarially Determined Contribution

As presented in the preceding table, the contribution necessary for the fiscal year ending September 30, 2023 to support the current benefits for the St. John's River Power Park System Employees' Retirement Plan under the current funding objectives is \$108,830, down from \$3,374,430 for the fiscal year ending September 30, 2022. Please note that the Employer Contribution for the 2023 fiscal year is developed *assuming* it would be deposited in bi-weekly intervals throughout the year.

This contribution was determined under a current practice of amortizing all of the expected Unfunded Actuarial Accrued Liability within one year and is regarded as a minimum required from the plan employer.



Credit Balance

As directed by the representative of the Retirement Committee, a credit balance was established following a contribution made during fiscal year 2018 significantly exceeding 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 reduce 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.

Employer contributions made during the year ending September 30, 2021 totaled \$0 after application of a portion of the Credit Balance. September 30, 2020 Credit Balance of \$8,962,815 was more than sufficient to fully satisfy the Actuarially Determined Contribution for the year in the amount of \$3,901,061 (developed in the valuation as of October 1, 2019). As a result, the September 30, 2021 Credit Balance ending value is \$5,490,393. A numerical illustration can be found on page B-4. Based on current projections, this amount is sufficient to fully satisfy employer contributions for the years ending September 2022 and 2023.

Contribution Volatility

The Required Employer Contribution is lower than determined in the previous valuation. In absence of a different 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

We recommend an update of the survey of professional investment forecasters (including input from the plan’s investment consultant firm). Our last analysis was based on professional forecasters’ 2020 expectations developed using data through 2019. This update may guide decision-makers about whether to retain the same economic assumptions for the 2022 valuation or adjust it.

For long-term planning purposes, it is recommended that the Committee (or JEA management) continues the process of designing a new funding policy, tailored around the long-term financial goals of the Plan Sponsor (SJRPP/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

There have been no revisions in assumptions and methods.



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 gain during the year ending September 30, 2021 primarily due to a very favorable investment experience. The Plan's rate of return on the Actuarial Value of Assets (Market Value – Credit Balance) was 21.3%, exceeding the 6.0% return assumption.

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 Plan'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:

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Ratio of the market value of assets to total payroll	1.1*	1.0	1.0	1.0
Ratio of actuarial accrued liability to payroll	0.9*	1.0	1.0	1.0
Ratio of actives to retirees and beneficiaries	0.0	0.0	0.0	0.0
Ratio of net cash flow to market value of assets	-7.8%	0.1%	-8.2%	3.7%
Duration of the present value of future benefits	9.7	9.7	9.9	10.4

**For purposes of these measurements, we used a rough estimate of the total payroll for all JEA employees of \$175,000,000.*

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.



DURATION OF PRESENT VALUE OF FUTURE BENEFITS

The duration of the present value of future benefits may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the present value of future benefits would increase approximately 10% if the assumed rate of return were lowered 1%.

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, 2021	October 1, 2020
ACTIVE MEMBERS		
Number	3	5
Covered Annual Payroll	\$ 284,024	\$ 467,042
Average Annual Pay	\$ 94,675	\$ 93,408
Average Age	56.7	59.2
Average Past Service	22.8	26.3
Average Age at Hire	33.9	32.9
RETIREES & BENEFICIARIES		
Number	387	385
Annual Benefits	\$ 12,859,664	\$ 12,897,395
Average Annual Benefit	\$ 33,229	\$ 33,500
Average Age	69.5	68.9
TERMINATED VESTED MEMBERS		
Number	68	74
Annual Benefits	\$ 494,469	\$ 510,602
Average Annual Benefit	\$ 7,272	\$ 6,900
Average Age	51.4	51.3

ACTUARIALLY DETERMINED CONTRIBUTION (ADC)		
A. Valuation Date	October 1, 2021	October 1, 2020
B. ADC to Be Paid During Fiscal Year Ending	9/30/2023	9/30/2022
C. Assumed Date(s) of Employer Contribution(s)	Bi-Weekly	Bi-Weekly
D. Actuarially Determined Contribution (ADC)		
1. Total Normal Cost as of the Valuation Date	\$ 106,401	\$ 110,131
2. Amortization Amount as of the Valuation Date	0	2,986,691
3. Interest Through Contribution Dates	<u>9,898</u>	<u>288,076</u>
4. Total ADC as of the Contribution Dates	116,299	3,384,898
5. Estimated Employee Contributions made as of the Contribution Dates	<u>(7,469)</u>	<u>(10,468)</u>
6. Net Employer Contribution	\$ 108,830	\$ 3,374,430
7. Net Contribution as % of Expected Covered Payroll	58.28 %	1,289.46 %
E. Expected Covered Payroll for the Contribution Year	186,726	261,694

CALCULATION OF NORMAL COST		
A. Valuation Date	October 1, 2021	October 1, 2020
B. Total (Employer/Employee) Normal Cost as of the Valuation Date for:		
1. Active Members' Benefits		
a. Service Retirement Benefits	\$ 8,660	\$ 19,023
b. Termination Benefits	951	1,849
c. Disability Benefits	196	328
d. Preretirement Death Benefits	291	442
f. Total	<u>10,098</u>	<u>21,642</u>
2. Administrative Expenses	<u>96,303</u>	<u>88,489</u>
3. Total (Employer/Employee) Normal Cost as of the Valuation Date	106,401	110,131

Derivation of Amortization Payment for the Contribution Year	
1. UAAL As of October 1, 2021	\$ (20,921,703)
2. Normal Cost	106,401
Expected Employee Contributions	(7,469)
Employer Normal Cost	98,932
3. Expected Employer Contribution*	3,374,430
4. Interest at the assumed rate:	
a. on 1 for one year	(1,255,302)
b. on 2 for one year	5,936
c. on 3 from dates paid	101,233
d. a + b - c	(1,350,599)
5. Projected UAAL at September 30, 2022 1 + 2 - 3 + 4d	(25,547,800)
6. Projected UAAL Discounted to the Valuation Date	(24,101,698)

* Contribution determined in the October 1, 2020 Valuation for the year ending September 30, 2022 and satisfied by application of the available Credit Balance.



CREDIT BALANCE ACCOUNT

CREDIT BALANCE ACCOUNT		
A. Credit Balance for Contribution Year Ending September 30, 2021		
1. Credit Balance at October 1, 2020		\$8,962,815
2. Additions		
a) Contributions made		0
3. Deductions		
a) Credit Balance applied to ADC		
i. Actuarially Determined Contribution (ADC)	3,901,061	
ii. Amount Available	9,242,043	
iii. Credit Balance applied to ADC, lesser of i and ii	3,901,061	
b) Waived Credit Balance	0	
c) Total Deductions		3,901,061
4. Interest		
a) Interest rate	6.0%	
b) Interest Credited		428,639
5. Credit Balance at September 30, 2021 (1 + 2b - 3c + 4b)		\$5,490,393
B. Projected Credit Balance for Contribution Year Ending September 30, 2022		
1. Credit Balance at October 1, 2021		\$5,490,393
2. Additions		
a) Excess Contributions		
i. Actuarially Determined Contribution (ADC)	3,374,430	
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)	3,374,430	
ii. Amount Available (adjusted for interest)	5,661,441	
iii. Credit Balance applied to ADC, lesser of i and ii	3,374,430	
b) Waived Credit Balance	0	
c) Total Deductions		3,374,430
4. Interest		
a) Interest rate	6.0%	
b) Interest Credited (Charged)		235,026
5. Credit Balance at September 30, 2022 (1 + 2b - 3c + 4b)		\$2,350,989

ACTUARIAL VALUE OF BENEFITS AND ASSETS

A. Valuation Date	October 1, 2021	October 1, 2020
B. Actuarial Present Value of All Projected Benefits for		
1. Active Members		
a. Service Retirement Benefits	\$ 1,301,043	\$2,967,920
b. Termination Benefits	5,778	6,607
c. Disability Benefits	4,470	10,018
d. Preretirement Death Benefits	7,064	12,987
f. Total	<u>1,318,355</u>	<u>2,997,532</u>
2. Inactive Members		
a. Retirees & Beneficiaries	156,473,175	159,497,263
c. Terminated Vested Members	5,980,612	5,333,247
d. Total	<u>162,453,787</u>	<u>164,830,510</u>
3. Total for All Members	163,772,142	167,828,042
C. Actuarial Accrued (Past Service) Liability	163,682,311	167,694,945
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	163,662,805	167,661,738
E. Plan Assets		
1. Market Value	190,094,407	169,980,079
2. Credit Balance	5,490,393	8,962,815
3. Actuarial Value (1 -2)	184,604,014	161,017,264
F. Unfunded Actuarial Accrued Liability (C-E3)	(20,921,703)	6,677,681
G. Actuarial Present Value of Projected Covered Payroll	1,657,153	2,012,241
H. Actuarial Present Value of Projected Member Contributions	66,286	80,490

FINANCIAL SOUNDNESS

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.

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.

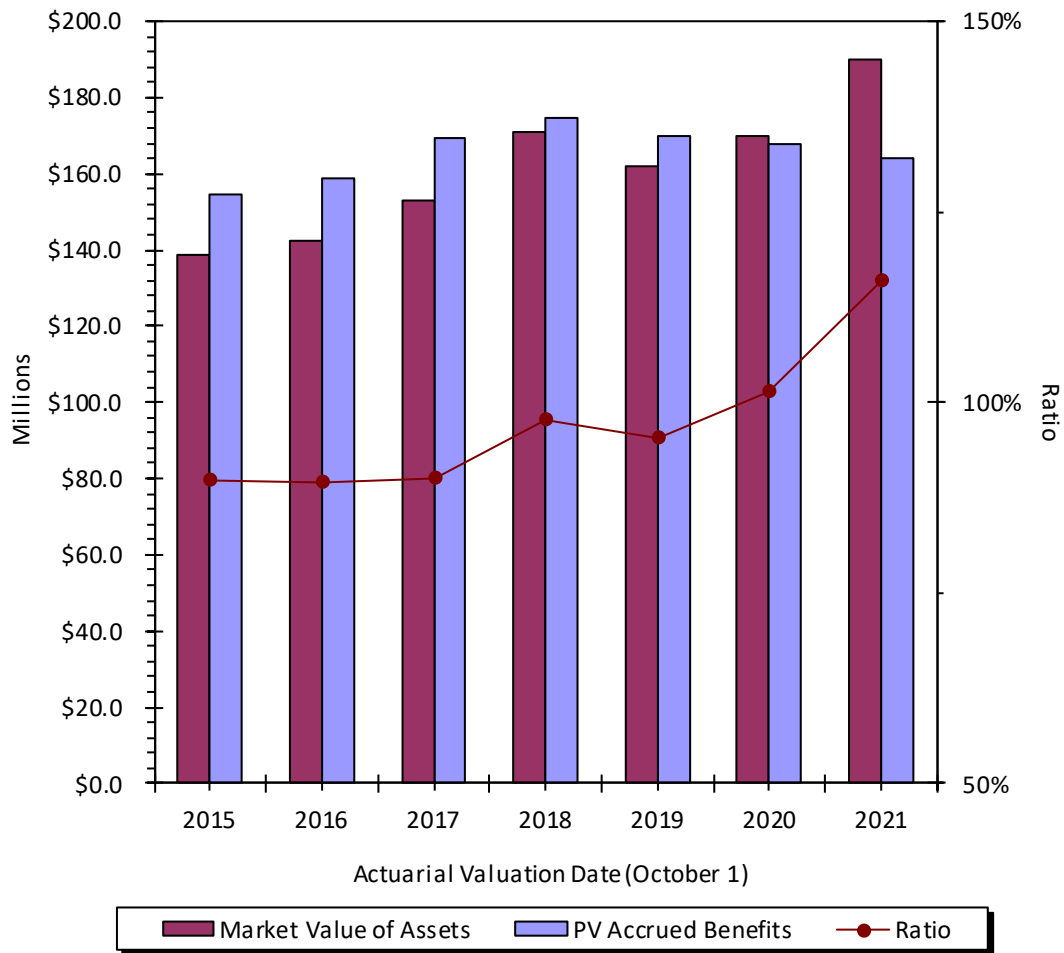
The total of the two items should generally be fully covered by assets. That portion of the total of the two items covered by assets should increase over time assuming an ongoing plan. Often assets continue to grow beyond the actuarial present value of these two items.

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		
	10/1/2021	10/1/2020	10/1/2019
1. Accumulated Contributions of Active Members	\$ 161,904	\$ 271,771	\$ 253,066
2. APV of Projected Benefits in Pay Status and for Vested Terminations	162,453,787	164,830,510	167,051,802
3. APV of Accrued Benefits for Active Participants (Employer Portion)	<u>1,047,114</u>	<u>2,559,457</u>	<u>2,465,269</u>
4. Total	163,662,805	167,661,738	169,770,137
5. Market Value of Assets	190,094,407	169,980,079	162,012,613
6. Assets as % of Total	116 %	101 %	95 %



Ratio of Market Value of Assets to Present Value of Accrued Benefits



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
10/1/20	161,017	167,695	96
10/1/21	184,604	163,682	113

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	\$ 6,677,681
2.	Last Year's Normal Cost	110,131
	Last Year's Expected Employee Contributions	18,682
	Last Year's Employer Normal Cost	91,449
3.	Last Year's Employer Contribution	3,901,061
4.	Interest at the assumed rate:	
	a. on 1 for one year	400,661
	b. on 2 for one year	5,487
	c. on 3 from dates paid	117,032
	d. a + b - c	289,116
5.	This Year's Expected UAAL	
	1 + 2 - 3 + 4d	3,157,185
6.	This Year's Actual UAAL (before any changes in benefits or assumptions)	(20,921,703)
7.	Net Actuarial Gain (Loss): (5) - (6)	24,078,888

Gain (Loss) by Source		
1.	Gain (Loss) due to investments	23,933,352
2.	Gain (Loss) due to other sources	145,536
3.	Total Gain (Loss): (1) + (2)	24,078,888

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)
9/30/2020	(3,028,198)	(18,958,527)
9/30/2021	24,078,888	5,120,361

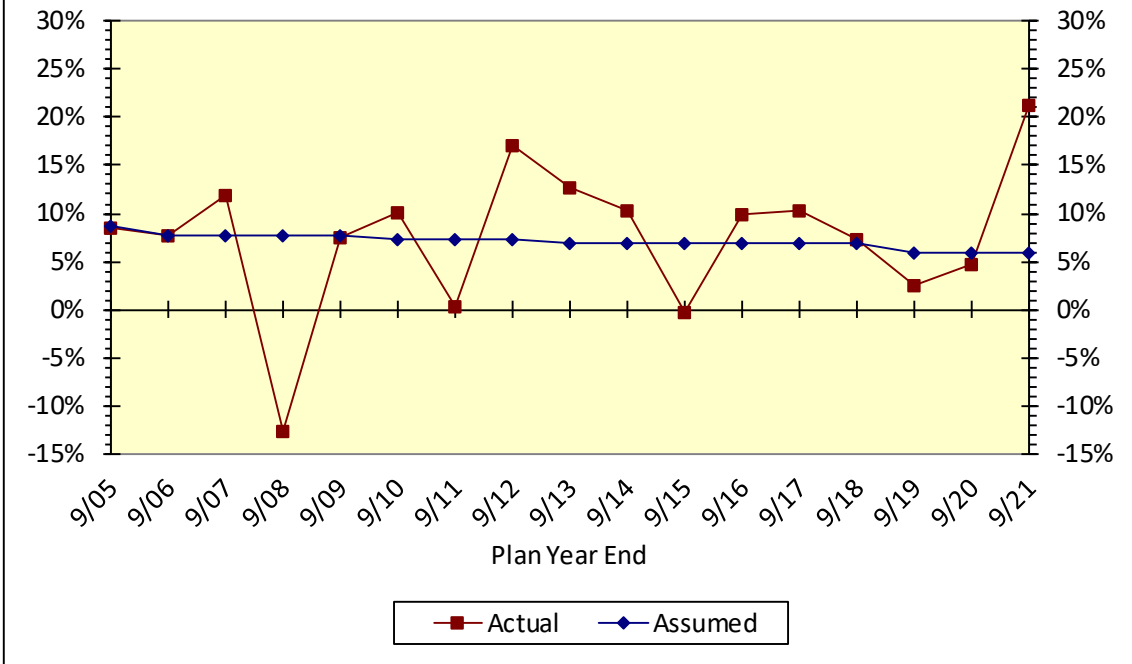
The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the history of actuarial fund earnings and salary increase rates compared to the assumed rates:

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
9/30/2020	4.78	6.00	3.21	2.59
9/30/2021	21.33	6.00	2.17	2.50
Average	7.39 %	7.14 %	3.68 %	3.51 %

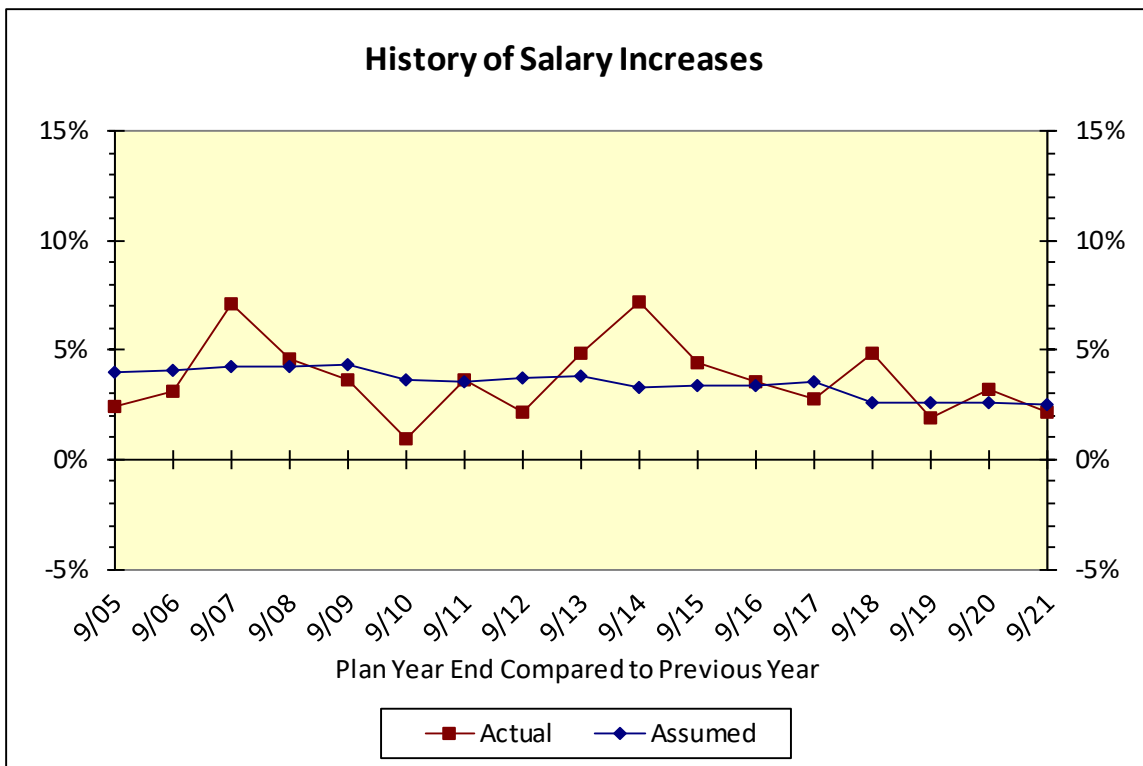
The actuarial investment return rates shown above are based on the actuarial value of assets, which has been the same as fair market value since at least 2007 (and possibly earlier). The actual salary increase rates shown above are the increases received by those active members who were included in the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



History of Actuarial Investment Return



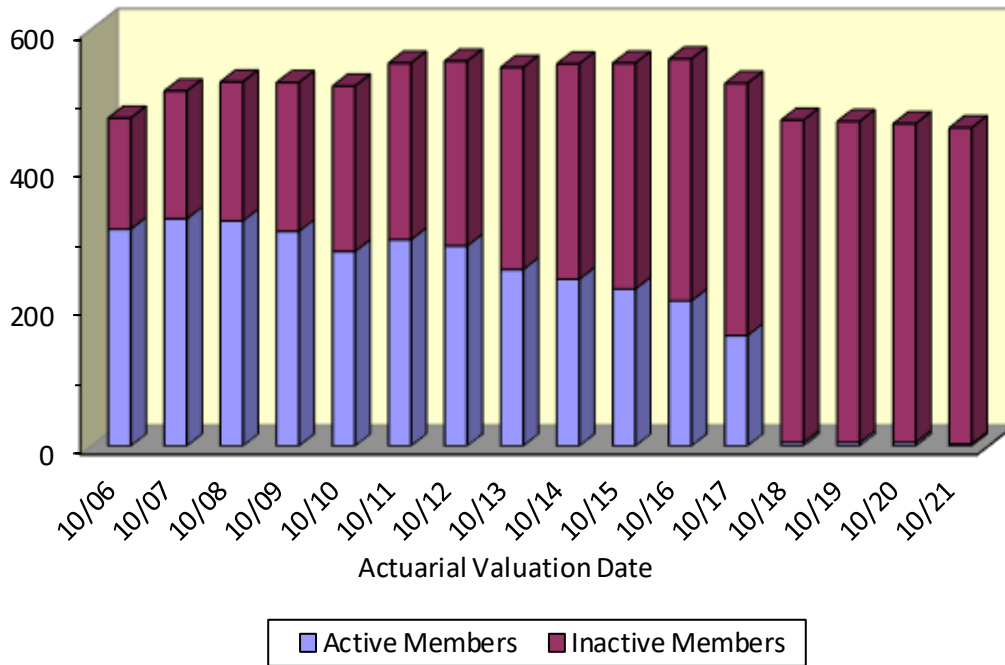
History of Salary Increases



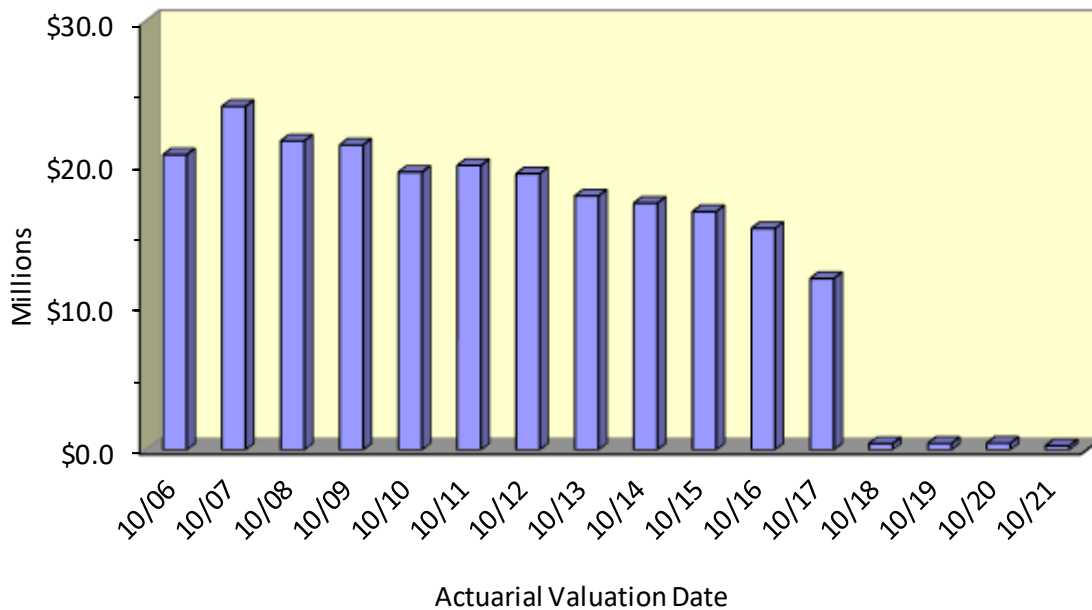
RECENT HISTORY OF VALUATION RESULTS							
Valuation Date	Number of		Reported Annual Payroll (in Thousands)	Actuarial Value of Assets (in Thousands)	UAAL (in Thousands)	Total Normal Cost	
	Active Members	Inactive Members				Amount (in Thousands)	% of Payroll
10/1/06	312	160	20,648	51,498	35,035	2,004	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
10/1/20	5	459	467	161,017	6,678	110	23.6
10/1/21	3	455	284	184,604	(20,922)	106	37.5



Recent History of Number of Members



Recent History of Covered Annual Payroll



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	0 **
10/1/18	9/30/20	17,167,965	9,980.21	13,307,093 ***
10/1/19	9/30/21	3,901,061	2,186.63	0 ****
10/1/20	9/30/22	3,374,430	1,289.46	TBD ****
10/1/21	9/30/23	108,830	58.28	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 CY 2020.

*** CY 2020 contribution was fully satisfied by using a portion of the Credit Balance. As of October 1, 2020 the credit balance adjusted for interest was \$8,962,815 and was available to satisfy contribution requirements for CY 2021.

**** CY 2021 contribution was fully satisfied by using a portion of the Credit Balance. As of October 1, 2021 the credit balance adjusted for interest was \$5,483,308 and was available to satisfy contribution requirements for CY 2022.



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. The goal is to eliminate the expected Unfunded Actuarial Accrued Liability with a single amortization payment made during the next fiscal year.

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 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).

Actuarial Standards of Practice (ASOP) No. 27 requires an assessment of the reasonableness of the actuarial assumptions selected or adopted by the Committee. We consider all actuarial assumptions employed in this actuarial valuation to be reasonable, using broad definitions set forth in ASOP No. 27. This ASOP also requires a disclosure of information and analysis used to support the actuary's determination that the assumption does not significantly conflict with what, in the actuary's professional judgment, is reasonable for the purpose of the measurement.

There is a range of reasonableness for an appropriate pension return assumption, because no one knows for certain what the future will bring. Based on the capital market assumptions published by a dozen large professional investment forecasting firms (detailed analysis documented in our letter report dated October 20, 2020), the mid-point of our range of a reasonable return assumption for this valuation is 5.1%. The Pension Committee selected a 6.0% return assumption for this October 1, 2021 actuarial valuation. While at the top end of our range, we consider this reasonable.



We recommend an update of our survey of professional investment forecasters (including input from the plan’s investment consultant firm). Our last analysis was based on professional forecasters’ 2020 expectations developed using data through 2019. This update may (a) guide decision-makers about whether to retain the same economic assumptions for the 2022 valuation or adjust it and (b) guide GRS in knowing if the current return assumption continues to lie within (or outside) an updated range of reasonableness for compliance with Actuarial Standards of Practice No. 27.

The **wage inflation rate** assumed in this valuation is 3.0% per year. The Wage Inflation Rate does not include pay changes related to individual merit and seniority effects applicable to individuals but reflects pay increases for an individual that are due to macroeconomic forces including productivity, price inflation, and labor market conditions. The **price inflation rate** assumed in this valuation is 2.25% 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, 2020 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

This assumption is used to measure probabilities of each benefit payment being made after retirement. Rates of model 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.

It is also assumed that vested members with deferred benefits who are eligible for subsidized early payment reduction will commence collecting their benefits at the earliest eligibility to do so.

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

<i>Administrative & Investment Expenses</i>	Annual administrative expenses assumption is based on the actual expenses paid during the preceding fiscal year and adjusted for inflation, but reduced for one-time expenses. Investment expenses are offset against gross investment income. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Exact fractional service is used to determine the amount of benefit payable.
<i>Decrement Operation</i>	Decrements operate simultaneously. Termination rates cease upon eligibility for normal or early retirement.
<i>Decrement Timing</i>	Decrements of all types are assumed to occur at the beginning of a year.
<i>Eligibility Testing</i>	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.
<i>Forfeitures</i>	Vested members who terminate with a benefit worth less than 100% of their own accumulated contributions were assumed to forfeit their vested benefit.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be received biweekly, unless otherwise specified. Member contributions are assumed to be biweekly throughout the year based upon the computed percent of payroll shown in this report.
<i>Marriage Assumption</i>	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.
<i>Normal Form of Benefit</i>	The normal form of benefit is 75% Joint and Survivor Annuity.
<i>Pay Increase Timing</i>	Beginning of fiscal year. This is equivalent to assuming that reported pays represent the actual amount paid during the previous fiscal year.
<i>Service Credit Accruals</i>	It is assumed that members accrue one year of service credit per year.



GLOSSARY OF TERMS

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		
	9/30/2021	9/30/2020
Cash and Securities - Market Value		
Cash and Cash Equivalents	\$ 11,110,786	\$ 3,272,810
US Government Bonds & Notes	67,321,883	67,508,927
Corporate Bonds	0	0
Mortgage/Asset-Backed Securities	0	0
Common & Preferred Stocks	57,235,652	45,736,348
Equity Mutual Funds	54,368,608	52,926,027
Other Securities	<u>0</u>	<u>0</u>
Total	190,036,929	169,444,112
Receivables and Accruals		
Member Overpayments	715	67,754
Employer Contribution	0	0
Interest and Dividends	425,172	421,311
Due from Brokers	<u>14,601</u>	<u>103,671</u>
Total	440,488	592,736
Payables		
Due to Revenue Fund	0	1,196
Due to Brokers	<u>383,010</u>	<u>55,573</u>
Total	383,010	56,769
Net Assets - Market Value	\$ 190,094,407	\$ 169,980,079



PENSION FUND INCOME AND DISBURSEMENTS		
	Year Ending 9/30/2021	Year Ending 9/30/2020
Market Value at Beginning of Period	\$ 169,980,079	\$ 162,012,613
Income		
Member Contributions	14,925	18,705
Employer Contribution	0	13,307,093
Interest and Dividends	2,858,052	2,855,261
Realized and Unrealized Gain (Loss)	31,424,559	5,494,620
Total Income	34,297,536	21,675,679
Disbursements		
Benefit Payments (including Lump Sums)	13,537,955	13,150,108
Investment Related Expenses	551,069	471,774
Other Administrative Expenses	94,184	86,331
Total Disbursements	14,183,208	13,708,213
Net Increase During Period	\$ 20,114,328	\$ 7,967,466
Market Value at End of Period	\$ 190,094,407	\$ 169,980,079

INVESTMENT RATE OF RETURN

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
9/30/20	4.86
9/30/21	20.67
Average Compounded Rate of Return for	
5 Years	9.05 %
All Years	7.38 %

SECTION D

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA		
	From 10/01/20 To 10/01/21	From 10/01/19 To 10/01/20
A. Active Members		
1. Number Included in Last Valuation	5	5
2. New Members Included in Current Valuation	0	0
3. Non-Vested Employment Terminations	0	0
4. Vested Employment Terminations	0	0
5. Service Retirements	(2)	0
6. Disability Retirements	0	0
7. Deaths	0	0
8. Lump Sums paid out	0	0
9. Number Included in This Valuation	<u>3</u>	<u>5</u>
B. Terminated Vested Members		
1. Number Included in Last Valuation	74	80
2. Additions from Active Members	0	0
3. Lump Sum Payments/Withdrawals	0	0
4. Payments Commenced	(5)	(6)
5. Deaths Resulting in New Survivor Benefits	(1)	0
6. Other	0	0
7. Number Included in This Valuation	<u>68</u>	<u>74</u>
C. Service Retirees, Disability Retirees, Alt Payees & Beneficiaries		
1. Number Included in Last Valuation	385	382
2. Additions from Active Members	2	0
3. Additions from Terminated Vested Members	5	6
4. Deaths Resulting in No Further Payments	(8)	(3)
5. Deaths Resulting in New Survivor Benefits	(4)	(3)
6. New Survivor Benefit	7	3
7. End of Certain Period - No Further Payments	0	0
8. Other -- Data Adjustment	0	0
9. Number Included in This Valuation	<u>387</u>	<u>385</u>

STATISTICAL DATA

Active Members as of October 1, 2021

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	-	-	-	-	-	-	-	-
45-49	-	-	-	1	-	-	-	1
50-54	-	-	-	-	-	-	-	-
55-59	-	-	-	1	-	-	-	1
60-64	-	-	-	-	-	-	-	-
65&UP	-	-	-	-	-	-	1	1
TOTALS	-	-	-	2	-	-	1	3

Inactive Members as of October 1, 2021

Age Group	Retirees and Survivors	Avg. Annual Benefit	Terminated Vested	Avg. Annual Benefit
Under 45	0	0	19	2,522
45-49	1	3,977	4	4,600
50-54	4	46,846	14	6,048
55-59	29	31,712	17	10,764
60-64	71	40,674	9	13,087
65-69	102	34,669	5	8,540
70-74	104	34,960	0	0
75-79	48	24,340	0	0
80-84	15	23,642	0	0
85&UP	<u>13</u>	<u>12,753</u>	<u>0</u>	<u>0</u>
TOT	387	33,229	68	7,272

SECTION E

SUMMARY OF PLAN PROVISIONS

**ST. JOHN'S RIVER POWER PARK SYSTEM
EMPLOYEES' RETIREMENT PLAN**

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 a restated plan document, adopted effective October 1, 2015, and subsequent Amendment #1 (effective October 1, 2015) and Amendment #2 (effective January 5, 2018), and Amendment #3 (effective January 1, 2020). 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 and amended again effective January 1, 2020.

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

Effective as of the close of business on January 5, 2018 when the SJRPP Plant was shut down ("Shutdown Time"), the Plan was closed to new participation (including re-hires). The only current active participants are employees whose employment was transferred on or before the Shutdown Time from SJRPP to JEA and who elected to continue participating in the Plan instead of the City of Jacksonville retirement plan.

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, participants 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.

Group A employees have Tier One Benefits. They do not have Tier Two Benefits.



Group B Employees – An Employee who did 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 have Tier One Benefits. However, the BACKDROP distribution option is not available to Group B employees. They do not have Tier Two Benefits.

Group C Employees – A Participant who had accrued Tier One Benefits in the Plan prior to February 25, 2013, but who did 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 for Tier Two Benefits effective February 25, 2013.

Group D Employees – A Participant who had been newly hired or rehired on or after February 25, 2013 (and prior to the Shutdown Time) is a "Group D employee". Group D employees have Tier Two Benefits only.

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 transferees from JEA to SJRPP who had elected to participate in this Plan, Vesting Service and Benefit Service accrued only for periods of employment with SJRPP. For transferees from SJRPP to JEA who had elected to join the City of Jacksonville retirement plan, Benefit Service, Vesting Service, and Final Average Earnings were 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 generally 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.

However, any employee who was both actively employed at the Shutdown Time and at least age 55 at the Shutdown Time Became 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: As a result of the Plant shutdown, the concept of Early Retirement no longer applies. Prior to the Shutdown Time, a participant could 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)

There is no separate disability benefit under the Plan.

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 (or the participant was deemed vested as a result of the announcement of the Plant shutdown) 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 (and the participant was not otherwise deemed vested as a result of the Plant shutdown) 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, or if the participant was deemed vested. As a result of



the Plant shutdown, participants actively employed on the shutdown announcement date (March 17, 2017) were deemed full vested in their accrued benefits.

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. A participant with 10 or more years of Vesting Service can elect to take an early Termination Benefit on or after age 55. If the participant terminated employment prior to reaching the participant's earliest Retirement Date, the Early Payment Reduction Factor applies to the entire Tier One Accrued Benefit portion (if any) of the participant's Termination Benefit.

A participant who (1) at the Shutdown Time, was actively employed, had less than thirty (30) years of Vesting Service, and was under age 55, and (2) executes a release contemplated by a Settlement Agreement, may also be permitted to receive the Termination Benefit beginning at or after age 55, subject to a special benefit reduction factor contemplated in the Settlement Agreement, instead of the Early Payment Reduction Factor. The special benefit reduction factor is 12% for such a participant with ten or more years of Vesting Service at the Shutdown Time, and 22% for such a participant with less than ten years of Vesting Service at the Shutdown Time.

Participants who completed less than 5 years of Vesting Service, and were not otherwise deemed vested, will receive a refund of the participant's accumulated contributions.

Normal Form of 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) who are eligible for the Termination Benefit, 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 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.

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 remaining component 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, 2021	October 1, 2020
A. Participant Data		
Number Included:		
Actives	3	5
Service Retirees & Beneficiaries	387	385
Disability Retirees	0	0
Terminated Vested Members	68	74
Total Members and Beneficiaries	458	464
Total Annual Payroll	\$284,024	\$467,042
Annual Valuation Payroll	284,024	467,042
Expected Annual Payroll in Contribution Year	186,726	261,694
Total Annualized Benefits		
Retirees & Beneficiaries	12,859,664	12,897,395
Terminated Vested Members	494,469	510,602
B. Assets (Market Value)		
Cash and Cash Equivalents	\$ 11,110,786	\$ 3,272,810
US Government Bonds & Notes	67,321,883	67,508,927
Corporate Bonds	-	-
Mortgage/Asset-Backed Securities	-	-
Common & Preferred Stocks	57,235,652	45,736,348
Mutual Funds	54,368,608	52,926,027
Net Receivables & Payables	57,478	535,967
Total	190,094,407	169,980,079
Credit Balance	5,490,393	8,962,815
Actuarial Value	184,604,014	161,017,264
Assets include:		
Accumulated active member contributions (with interest if applicable)	161,904	271,771
C. Actuarial present value of accrued benefits		
(i) Vested accrued benefits		
Retired members and beneficiaries	156,473,175	159,497,263
Terminated members	5,980,612	5,333,247
Active members (includes non-forfeitable members contributions of 161,904 and 271,771)	1,209,018	2,831,228
Total	163,662,805	167,661,738
(ii) Non-vested accrued benefits	0	0
(iii) Total actuarial p.v. of accrued benefits	163,662,805	167,661,738
(iv) Actuarial p.v. of accrued benefits at year beginning	167,661,738	169,770,137
(v) Changes attributable to:		
Amendments	0	0
Assumption change	0	0
Operation of decrements	9,539,022	11,041,709
Benefit payments	(13,537,955)	(13,150,108)
Other	none	none
(vi) Net change	(3,998,933)	(2,108,399)
(vii) Actuarial p.v. of accr. benefits at end of year	163,662,805	167,661,738



COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2021	October 1, 2020
C. Liabilities- Actuarial Present Value of Future Benefits		
1. Active Members		
Service Retirement Benefits	\$1,301,043	\$2,967,920
Termination Benefits	5,778	6,607
Disability Benefits	4,470	10,018
Preretirement Death Benefits	7,064	12,987
Total Actives	1,318,355	2,997,532
2. Inactive Members		
Service Retirees & Beneficiaries	156,473,175	159,497,263
Terminated Vested Members	5,980,612	5,333,247
Total Inactive Members	162,453,787	164,830,510
3. Total Present Value for All Members	163,772,142	167,828,042
Total Present Value of:		
Future Salaries	1,657,153	2,012,241
Future Employee Contributions	66,286	80,490
Future Contributions from Other Sources	(20,898,158)	6,730,288
Derivation of Current Employer Unfunded Actuarial Accrued Liability (UAAL)		
a. Total UAAL for Prior Valuation Date	\$6,677,681	\$19,999,449
b. Employer Normal Cost for this period	91,449	125,539
c. Interest accrued on (a) and (b)	406,148	1,207,499
d. Contributions for this period	3,901,061	17,167,965
e. Interest accrued on (d)	117,032	515,039
f. Changes due to:		
Plan Amendment	0	0
Assumption Changes	0	0
Asset Method	0	0
Actuarial (Gain) Loss	(24,078,888)	3,028,198
g. Total Current UAAL: a+b+c-d-e+f	(20,921,703)	6,677,681
h. Funding UAAL	(20,921,703)	6,677,681
i. Credit Balance	5,490,393	8,962,815
j. Net Pension Liability	(26,412,096)	(2,285,134)



COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2021	October 1, 2020														
D. Pension Cost																
Entry Age Normal Cost for:																
Service Retirement Benefits	\$8,660	\$19,023														
Vesting Benefits	951	1,849														
Disability Benefits	196	328														
Preretirement Death Benefits	291	442														
Total Actives	10,098	21,642														
Administrative Expenses	96,303	88,489														
Total Normal Cost	106,401	110,131														
Payment Required to Amortize Unfunded Actuarial Accrued Liability	0	2,986,691														
Total Contribution at Valuation Date (EE + ER)	106,401	3,096,822														
Employer Contribution Adjusted for Frequency of Payments and Interest to Next Following Fiscal Year	108,830	3,374,430														
% of Expected Payroll	58.28%	1289.46%														
Amount Expected to be Contributed by Members Next FY	7,469	10,468														
% of Expected Payroll	4.00%	4.00%														
E. Past Contributions- For the Fiscal Years Ended September 30 of 2020 and 2021																
Required Contribution Determined in the Valuation as of	<u>October 1, 2019</u>	<u>October 1, 2018</u>														
by the Plan Sponsor	\$8,422,270	\$8,422,270														
by Members	\$44,121	\$44,121														
Actual Contribution for the Fiscal Year ended	<u>9/30/2021</u>	<u>9/30/2020</u>														
by the Plan Sponsor	-	\$13,307,093														
by Members	14,925	\$18,705														
F. Net experience (gain) loss during year:	(\$24,078,888)	\$3,028,198														
G. 1. Plan to Amortize Unfunded Actuarial Accrued Liability																
Payments determined to fully amortize all of the Unfunded Actuarial Accrued Liability by October 1, 2021.																
2. Schedule Illustrating the Amortization of the Unfunded Actuarial Accrued Liability (UAAL)																
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Year</th> <th style="text-align: center;">Projected UAAL</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2021 (peak)</td> <td style="text-align: center;">\$0</td> </tr> <tr> <td style="text-align: center;">2022</td> <td style="text-align: center;">\$0</td> </tr> <tr> <td style="text-align: center;">2023</td> <td style="text-align: center;">\$0</td> </tr> <tr> <td style="text-align: center;">2024</td> <td style="text-align: center;">\$0</td> </tr> <tr> <td style="text-align: center;">2025</td> <td style="text-align: center;">\$0</td> </tr> <tr> <td style="text-align: center;">2026</td> <td style="text-align: center;">\$0</td> </tr> </tbody> </table>			Year	Projected UAAL	2021 (peak)	\$0	2022	\$0	2023	\$0	2024	\$0	2025	\$0	2026	\$0
Year	Projected UAAL															
2021 (peak)	\$0															
2022	\$0															
2023	\$0															
2024	\$0															
2025	\$0															
2026	\$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
9/30/2021	2.2%	2.5%
9/30/2020	3.2%	2.6%
9/30/2019	1.9%	2.6%

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

Year Ended	Actual	Assumed
9/30/2021	21.33%	6.00%
9/30/2020	4.78%	6.00%
9/30/2019	2.48%	6.00%

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

Valuation Date	Total Payroll
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
9/30/2020	467,042
9/30/2021	284,024
Total % Increase Last Ten Years	-98.57%
Annual % Increase	-34.62%
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