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

Actuarial Valuation as of October 1, 2017



ANNUAL EMPLOYER CONTRIBUTION

DETERMINED BY THIS VALUATION

IS TO BE PAID IN THE EMPLOYER FISCAL YEAR ENDING SEPTEMBER 30, 2019





April 13, 2018

JEA The SJRPP Pension Committee

Dear Committee Members:

The results of the October 1, 2017 Annual Actuarial Valuation of the St. John's River Power Park System Employees' Retirement Plan (Plan) are presented in this report.

The computed contribution rate shown on page A-1 may be considered as a minimum contribution rate that complies with the Plan's funding policy. Users of this report should be aware that contributions made at that rate 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 rate 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 B 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.

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 rate for the fiscal year ending September 30, 2019. 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 findings in this report are based on data or other information through September 30, 2017. 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; 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 SJRPP Pension Committee April 13, 2018 Page 2

The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements. This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

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 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 Florida House Bill 1309 (codified in Chapter 2015-157).

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 taken into account 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.



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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

James J. Rizzo, ASA, MAAA Senior Consultant & Actuary

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Piotr Krekora, ASA, MAAA Consultant & Actuary



STATEMENT BY ENROLLED ACTUARY

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate. In my 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 taken into account 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.

Signature

April 13, 2018 Date

17-03355 Enrollment Number

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SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Funding Objective

According to the Administrative Committee, the funding objective of the Plan is to establish and receive contributions, which are intended to bring the Plan's funding ratio to 100% by October 1, 2019.

Comparison of Actuarially Determined Employer Contributions

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

	Base	YE 9/30/2019 d on 10/01/17 Valuation	Base	FYE 9/30/2018 d on 10/01/16 Valuation	Increase (Decrease)
Gross Contribution Requirement	\$	8,466,391	\$	8,375,114	\$ 91,277
Expected Employee Contribution	\$	44,121	\$	647,661	\$ (603,540)
Required Employer Contribution* (If Made in Equal Bi-weekly Installments)	\$	8,422,270	\$	7,727,453	\$ 694,817

Actuarially Determined Contribution

As illustrated in the preceding table, the contribution necessary for the fiscal year ending September 30, 2019 to support the current benefits for the St. John's River Power Park System Employees under the current funding objectives is \$8,422,270, up from \$7,727,453 for the fiscal year ending September 30, 2018. This contribution is computed in accordance with the Plan's current funding policy, which includes the objective of achieving a 100% funded ratio by October 1, 2019. Please note that the Employer Contribution for the 2019 fiscal year is developed *assuming* it would be deposited in bi-weekly intervals throughout the year.

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. Since the decision was announced on March 17, 2017, this event is treated as occurring during the 2017/18 Plan year and, consequently, results of this valuation reflect employment terminations effective January 5, 2018.

Closure of the plant triggered Plan provisions resulting in accelerated eligibility for unreduced retirement at age 55 regardless of service as applicable to all members meeting this condition on the plant closure



date of January 5, 2018. Furthermore provisions of the plan were interpreted by the Committee to accelerate vesting of all plan members actively participating in the Plan as of plan closure announcement date of March 17, 2017 and to allow for early retirement of all members actively employed on January 5, 2018 at age 55 regardless of service subject to subsidized benefit reduction. Under the interpretation, members with at least 10 years of service on the plant closure date are eligible for a benefit equal to 88% of their accrued benefit starting at age 55, while all other members not meeting conditions for the immediate unreduced retirement may be eligible for a benefit equal to 78% of their accrued benefit starting at age 55.

In order to improve accuracy of calculations, all known elections have been reflected in the valuation process. Specifically, optional forms of annuity payments with commencement date of February 1, 2018 and partial lump sum elections for members eligible for immediate retirement were taken into account. With the exception of a small number of actively employed members who were eligible to continue membership in the plan based on employment with JEA, benefit accruals were scheduled to cease on January 5. However, interest credits for Tier 2 participants are assumed to continue after the plant shutdown until the benefit distribution at age 55.

Contribution Volatility

The contribution for year ending September 30, 2019 was determined in accordance with the objective of fully paying off the Unfunded Actuarial Accrued Liability by the end of that year. Although, funding objectives like that often expose plan sponsors to contribution volatility, the combination of events and investment experience during the year ending September 30, 2017 resulted in a relatively small increase in the funding requirement for the upcoming contribution year.

Recommendations

The Actuarially Determined Contribution was developed according to a short term funding goal of achieving a 100% funded ratio within the next two years (including the year ending September 30, 2018 with contribution determined in the previous valuation). 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.

Revisions in Benefits

There have been no amendments or revisions in benefits since the previous valuation.

Revisions in Actuarial Assumptions and Methods

There have been no revisions in assumptions since the previous valuation.

<u>One Plan</u>

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. Actuarial experience during the year ending September 30, 2017 was driven primarily by the JEA Board decision to close the St. Johns River Power Park. As a result of that decision, the St. John's River Power Park System Employees' Retirement Plan experienced a very large number of employment terminations and retirements leading to significant liability losses.

On the other hand, the trust enjoyed very favorable investment earnings resulting in asset gains.

Under the current funding objective, the Unfunded Actuarial Accrued Liability is expected to be paid down to zero by September 30, 2019. Given that there are very few active participants remaining in the plan, future actuarial experience will be driven primarily by investment experience and to a lesser degree by members' mortality.

Analysis of Change in Employer Contribution

There was a net actuarial loss this year resulting from a combination of various offsetting factors:

- The main cause behind the liability increases was the closure of the SJRPP's power plant and associated benefit enhancements provided by the Plan such as eligibility to retire at age 55 regardless of age, as well as retirements of members already eligible for retirement and electing BACKDROP distributions.
- Accelerated vesting for all employees had an increasing effect on the liability, as this made every terminating employee eligible for some benefit regardless of the number of years of service.
- As accruals of benefits ceased for a vast majority of members. This had a small decreasing effect on liabilities for members not eligible for retirement.
- Liability losses were offset to some extent by gains on assets with the investment return of 10.4%, exceeding the assumed return for the year of 7%.

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



SECTION B

VALUATION RESULTS

PARTICIPANT DATA				
October 1, 2017 * October 1, 2016				
ACTIVE MEMBERS				
Number Covered Annual Payroll Average Annual Pay Average Age Average Past Service Average Age at Hire	159 \$ 11,988,122 \$ 75,397 49.7 15.2 34.5	\$ 15,489,302 \$ 74,111 47.5 13.3		
RETIREES & BENEFICIARIES				
Number Annual Benefits Average Annual Benefit Average Age	309 \$ 10,246,591 \$ 33,160 67.8	\$ 9,827,684 \$ 32,869		
TERMINATED VESTED MEMBERS				
Number Annual Benefits Average Annual Benefit Average Age	54 \$ 712,480 \$ 13,194 56.9	\$ 713,692 \$ 14,565		

* Headcounts presented above reflect employment status as of the valuation date, that is, employees terminating and retiring upon the plant closure are reported above as actives on October 1, 2017.



ACTUARIALLY DETERMINED CONTRIBUTION (ADC)				
A. Valuation Date	October 1, 2017	October 1, 2016		
B. ADC to Be Paid During Fiscal Year Ending	9/30/2019	9/30/2018		
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 2. Amount as of the Valuation Date to Amortize Unfunded Actuarial Liability by 10/1/2019 3. Interest Through Contribution Dates 4. Total ADC as of the Contribution Dates 	\$ 178,091 7,456,922 <u>831,378</u> 8,466,391	\$ 1,112,830 6,439,869 <u>822,415</u> 8,375,114		
5. Estimated Employee Contributions made as of the Contribution Dates	(44,121)	(647,661)		
 6. Net Employer Contribution 7. Net Contribution as % of Expected Covered Payroll 	\$ 8,422,270 763.56 %	\$		
E. Expected Covered Payroll for the Contribution Year	1,103,020	16,191,522		

In order to achieve the current funding objective of accumulating enough assets to eliminate unfunded liability by October 1, 2019, the amortization payment was developed to pay for any investment and other actuarial losses experienced by the plan through the year ending September 30, 2017 during the next two years. As a result, the amortization installment amount shown above is higher than in the previous year.



CALCULATION OF NORMAL COST				
A. Valuation Date	October 1, 2017	October 1, 2016		
 B. Total (Employer/Employee) Normal Cost as of the Valuation Date for: 1. Active Members' Benefits a. Service Retirement Benefits b. Termination Benefits c. Disability Benefits d. Preretirement Death Benefits f. Total 	\$ 98,698 7,542 1,836 3,784 111,860	\$ 919,513 77,171 15,429 34,486 1,046,599		
2. Administrative Expenses	66,231	66,231		
 Total (Employer/Employee) Normal Cost as of the Valuation Date 	178,091	1,112,830		

Schedule of Amortization Payments				
Item Description	Number of Payments Remaining*	Amortization Payment	Current Unfunded	
Unfunded Actuarial Accrued Liabilities	1	\$7,456,922	\$16,523,221	
TOTAL		\$7,456,922	\$16,523,221	

*There are two amortization payments remaining resulting from this valuation (in addition to an amortization payment included in the contribution for the year ending September 30, 2018). The final amortization payment will be made during the year ending September 30, 2019. The payment amount has been determined with consideration given to the minimum contributions scheduled to be made during the year ending September 30, 2018.



	ACTUARIAL VALUE OF BENEFITS AND ASSETS				
A.	Valuation Date	October 1, 2017	October 1, 2016		
В.	Actuarial Present Value of All Projected Benefits for 1. Active Members* a. Service Retirement Benefits b. Termination Benefits c. Disability Benefits d. Preretirement Death Benefits f. Total	\$ 40,972,102 3,210,563 37,250 89,157 44,309,072	\$46,364,663 630,461 429,157 959,225 48,383,506		
	 Inactive Members* a. Retirees & Beneficiaries c. Terminated Vested Members d. Total 	120,270,323 5,422,368 125,692,691	116,187,992 5,177,905 121,365,897		
	3. Total for All Members	170,001,763	169,749,403		
	Actuarial Accrued (Past Service) Liability Actuarial Value of Accumulated Plan Benefits per FASB No. 35	169,320,985 169,102,920	162,028,867 158,940,864		
E.		152,797,764 152,797,764	142,285,489 142,285,489		
F.	Actuarial Present Value of Projected Covered Payroll	12,051,055	137,886,030		
G.	Actuarial Present Value of Projected Member Contributions	482,042	5,515,441		

* Allocation of liabilities between active and inactive members presented above reflects employment status as of the valuation date, that is, liability for employees terminating and retiring upon the plant closure are reported above as liability for actives on October 1, 2017.



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:

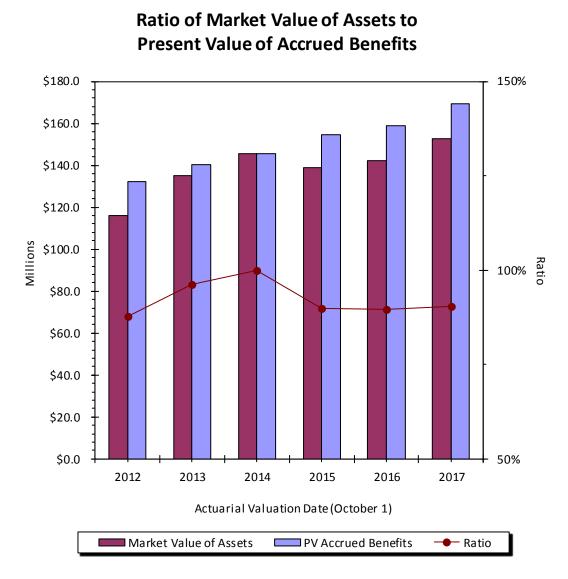
- 1. The actuarial present value of projected benefits payable to those already receiving benefits and to vested terminations, and
- 2. The actuarial present value of accrued benefits payable to active participants. This amount is based on benefits earned to date without future credited service or salary 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			
	10/1/2017	10/01/16	10/01/15	
1. Accumulated Contributions of Active Members	\$ 1,837,408	\$ 4,843,046	\$ 5,346,245	
 APV of Projected Benefits in Pay Status and for Vested Terminations 	125,692,691	121,365,897	106,852,938	
 APV of Accrued Benefits for Active Participants (Employer Portion) 	<u>41,572,821</u>	<u>32,731,921</u>	<u>42,490,156</u>	
4. Total	169,102,920	158,940,864	154,689,339	
5. Market Value of Assets	152,797,764	142,285,489	138,901,756	
6. Assets as % of Total	90 %	90 %	90 %	



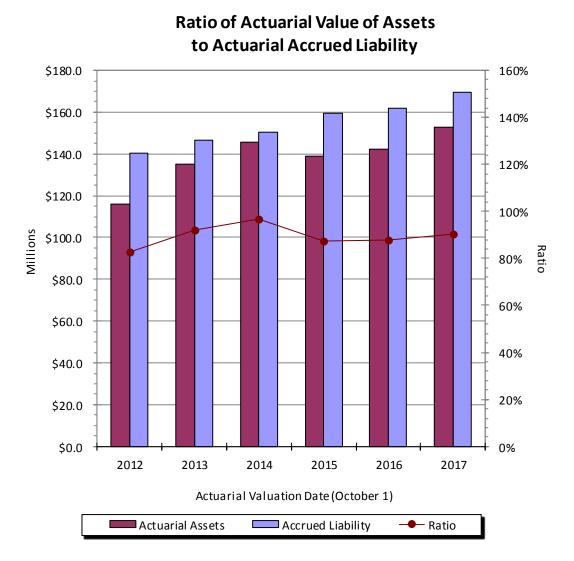


Long Term Solvency

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





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	\$	19,743,378		
2.	Last Year's Normal Cost		1,112,830		
	Last Year's Expected Employee Contributions		619,572		
	Last Year's Employer Normal Cost		493,258		
3.	Last Year's Actual Employer Contribution		8,039,385		
4.	Interest at the assumed rate:				
	a. on 1 for one year		1,382,036		
	b. on 2 for one year		34,528		
	c. on 3 from dates paid		281,378		
	d. a + b - c		1,135,186		
5.	This Year's Expected UAAL				
	1 + 2 - 3 + 4d		13,332,437		
6.	This Year's Actual UAAL (before any				
	changes in benefits or assumptions)		16,523,221		
7.	Net Actuarial Gain (Loss): (5) - (6)		(3,190,784)		

	Gain (Loss) by Source	
1.	Gain (Loss) due to investments	4,753,279
2.	Gain (Loss) due to other sources	(7,944,063)
3.	Gain (Loss) due to other sources	(3,190,784)



Net actuarial gains in previous years have been as follows:

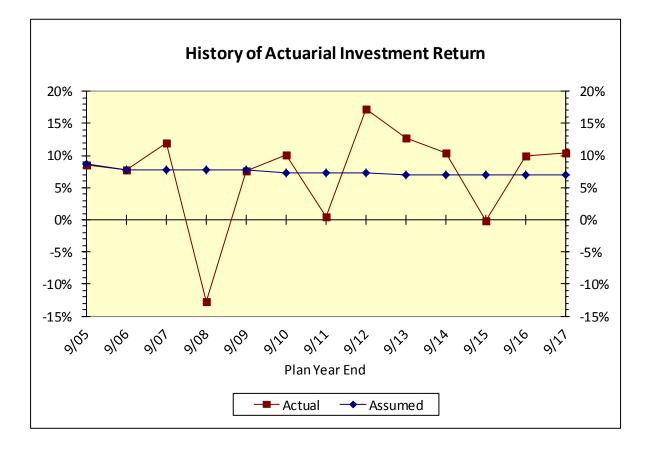
Year Ended	Actuarial Gain (Loss)	Cumulative Gain (Loss)
9/30/2010	\$ (1,058,645)	\$
9/30/2011	(12,002,660)	(13,061,305)
9/30/2012	12,570,367	(490,938)
9/30/2013	3,388,019	2,897,081
9/30/2014	2,313,420	5,210,501
9/30/2015	(14,280,756)	(9,070,255)
9/30/2016	465,572	(8,604,683)
9/30/2017	(3,190,784)	(11,795,467)

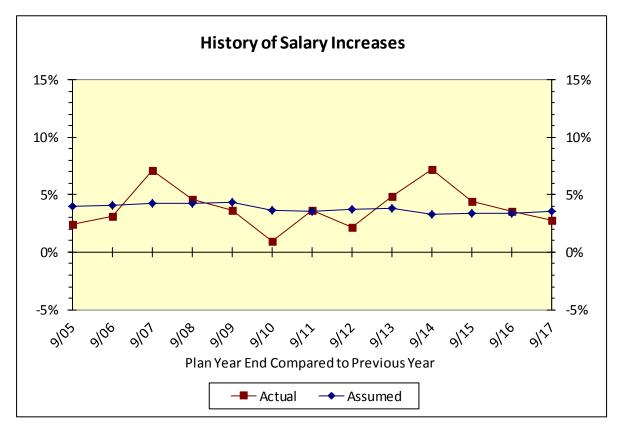
The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the history of actuarial fund earnings and salary increase rates compared to the assumed rates:

	Actuarial Investment Return		Salary II	ncreases
Year Ending	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
Average	6.97 %	7.42 %	3.87 %	3.80 %

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.



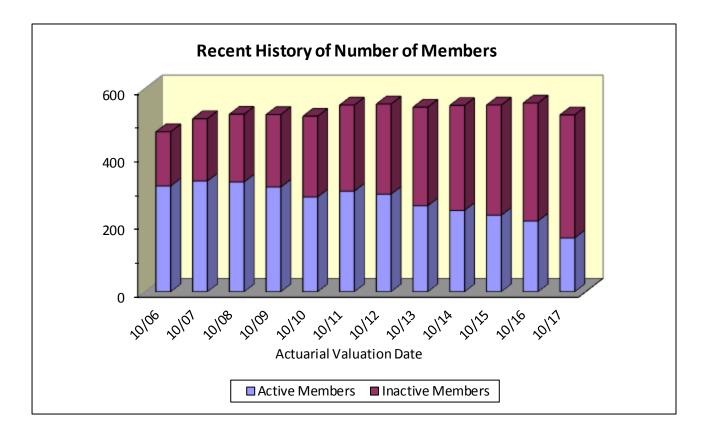


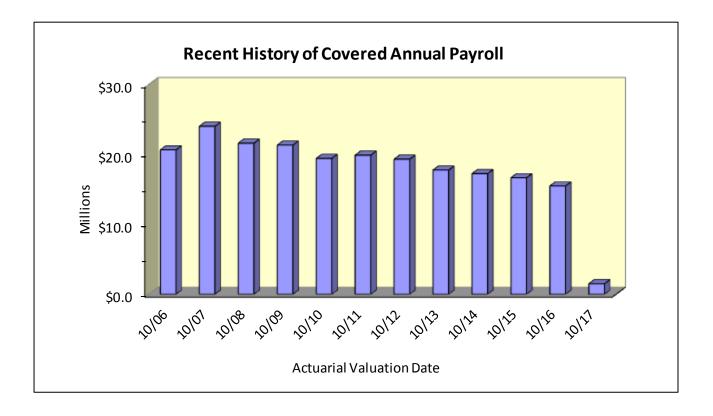




	RECENT HISTORY OF VALUATION RESULTS						
	Number of		Reported Annual Actuarial Value of	Actuarial Value of	-	Total Normal Cost	
Valuation Date	Active Members	Inactive Members	Payroll (in Thousands)	Assets (in Thousands)	UAAL (in Thousands)	Amount (in Thousands)	% of Payroll
10/1/06	312	160	20,648	51,498	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	1,502	152,798	16,523	178	11.9









RECENT HISTORY OF ACTUARIALLY DETERMINED AND ACTUAL CONTRIBUTIONS				
	End of Year To Actuarially Determined Contributions			
Valuation	Which Valuation Applies	Employer Portion	% of Expected Employer Portion Payroll Actual Co	
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	TBD
10/1/17	9/30/19	8,422,270	763.56	TBD



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 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.

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 7.00% 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.

Demographic Assumptions

Rates of mortality are the same rates used by the Florida Retirement System for its July 1, 2017 actuarial valuation.

Healthy Mortality (Pre-Retirement and Post-Retirement) rates used:

Female Non-Disabled: RP2000 Generational, 100% Annuitant White Collar, generationally projected from year 2000 using Scale BB

Male Non-Disabled (other than Special Risk): RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, generationally projected from year 2000 using Scale BB.

Disabled Mortality rates used:

Female Disabled: RP2000, 100% Disabled Female set forward two years, no projection scale *Male Disabled*: RP2000, 100% Disabled Male setback four years, no projection scale

These rates were developed by the Florida Retirement System in a recent experience study and will be mandated by the State Statutes for funding valuations beginning with 2016 valuations. The following table illustrates assumed rates projected to the valuation year:

	Future Life		Mor	tality
	Expectar	icy (Years)	Ra	ites
Ages	Men	Women	Men	Women
45	40.76	43.28	0.15%	0.10%
50	35.54	38.52	0.21%	0.15%
55	29.99	33.63	0.60%	0.32%
60	25.32	29.20	0.76%	0.47%
65	20.80	24.86	1.15%	0.74%
70	16.55	20.72	1.78%	1.24%
75	12.69	16.85	2.97%	2.09%
80	9.36	13.27	5.03%	3.51%

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	Retirement
Eligibility	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	Sample	5+ Years of
Service	of Age	Ages	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 are assumed to be equal to the actual expenses paid during the preceding fiscal year. 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			
	9/30/2017	9/30/2016	
Cash and Securities - Market Value			
Cash and Cash Equivalents US Government Bonds & Notes Corporate Bonds Mortgage/Asset-Backed Securities Common & Preferred Stocks Mutual Funds Total	\$ 3,365,713 58,916,656 0 0 45,999,319 44,328,310 152,609,998	\$ 3,132,395 58,710,591 0 39,403,236 40,664,268 141,910,490	
Receivables and Accruals			
Employer Contribution Interest and Dividends Due from Brokers Total	0 400,642 <u>63,592</u> 464,234	0 353,895 <u>46,537</u> 400,432	
Payables			
Due to Revenue Fund Due to Brokers Total	11,793 	0 	
Net Assets - Market Value	\$ 152,797,764	\$ 142,285,489	



PENSION FUND INCOME AND DISBURSEMENTS		
	Year Ending 9/30/2017	Year Ending 9/30/2016
Market Value at Beginning of Period	\$ 142,285,489	\$ 138,901,756
Income		
Member Contributions Employer Contribution Interest and Dividends Realized and Unrealized Gain (Loss) Total Income	624,821 8,039,385 2,534,673 12,479,782 23,678,661	629,206 2,142,182 2,504,206 11,344,782 16,620,376
Disbursements		
Benefit Payments Investment Related Expenses Other Administrative Expenses Total Disbursements	12,256,937 443,254 466,195 13,166,386	12,326,033 470,744 439,866 13,236,643
Net Increase During Period	\$ 10,512,275	\$ 3,383,733
Market Value at End of Period	\$ 152,797,764	\$ 142,285,489



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 9/30/06 9/30/07 9/30/08 9/30/09 9/30/10 9/30/11 9/30/12 9/30/13 9/30/13 9/30/14 9/30/15 9/30/16 9/30/17 Average Compounded Rate of Return for	8.59 % 7.77 11.89 (12.67) 7.60 10.14 0.41 17.17 12.64 10.32 (0.19) 9.99 10.39
5 Years All Years	8.53 % 6.97 %



SECTION D

MISCELLANEOUS INFORMATION

RECONCILIATION OF MEMBERSHIP DATA*						
		From 10/01/16 To 10/01/17	From 10/01/15 To 10/01/16			
Α.	Active Members					
1.	Number Included in Last Valuation	209	226			
2.	New Members Included in Current Valuation	2	11			
3.	Non-Vested Employment Terminations	(28)	(4)			
4.	Vested Employment Terminations	(15)	0			
5.	Service Retirements	(9)	(24)			
6.	Disability Retirements	0	0			
7.	Deaths	0	0			
8.	Other Data Adjustment	0	0			
9.	Number Included in This Valuation	159	209			
В.	B. Terminated Vested Members					
1.	Number Included in Last Valuation	49	52			
2.	Additions from Active Members	15	0			
3.	Lump Sum Payments/Withdrawals	(6)	0			
4.	Payments Commenced	(3)	(2)			
5.	Deaths	(1)	(1)			
6.	Other	0	0			
7.	Number Included in This Valuation	54	49			
C.	Service Retirees, Disability Retirees & Beneficiaries					
1.	Number Included in Last Valuation	299	273			
2.	Additions from Active Members	9	24			
3.	Additions from Terminated Vested Members	3	2			
4.	Deaths Resulting in No Further Payments	(3)	(1)			
5.	Deaths Resulting in New Survivor Benefits	1	1			
6.	End of Certain Period - No Further Payments	0	0			
7.	Other Data Adjustment	0	0			
8.	Number Included in This Valuation	309	299			

* Headcounts presented above reflect employment status as of the valuation date, that is, employees terminating and retiring upon the plant closure are reported above as actives on October 1, 2017.



STATISTICAL DATA

Active Members as of October 1, 2017

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Totals	Avg. Pay
Under 25	0	0	0	0	0	0	0	0	0
25-29	4	2	0	0	0	0	0	6	64,369
30-34	12	7	5	0	0	0	0	24	66,817
35-39	2	6	2	0	0	0	0	10	67,675
40-44	2	6	6	0	0	0	0	14	69,729
45-49	2	6	3	0	0	0	2	13	76,539
50-54	4	4	13	0	0	3	1	25	81,030
55-59	1	6	7	0	0	4	20	38	78,419
60-64	0	1	3	0	0	3	10	17	76,714
65&UP	1	1	1	0	0	2	7	12	86,711
TOTALS	28	39	40	0	0	12	40	159	
Avg. Pay	64,919	72,262	76,834	0	0	83,729	81,851		75,397



Age Group	Retirees and Survivors	Avg. Annual Benefit	Terminated Vested	Avg. Annual Benefit
Under 45	1	3,977	2	1,744
45-49	0	0	5	8,621
50-54	7	45,816	13	15,919
55-59	27	45,750	11	15,098
60-64	68	37,087	18	12,940
65-69	96	36,109	4	14,074
70-74	68	27,677	1	3,653
75-79	26	23,824	0	0
80-84	11	15,013	0	0
85&UP	5	6,340	0	0
тот	309	33,160	54	13,194

Inactive Members as of October 1, 2017



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 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.
Tier One	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.
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 RACKDROD component is paid in a lump sum. The Normal Form of the
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, 2017	October 1, 2016
A. Participant Data		
Number Included:		
Actives	159	20
Service Retirees & Beneficiaries	309	29
Disability Retirees	0	
Terminated Vested Members	54	4
Total Members and Beneficiaries	522	55
Total Annual Payroll	\$11,988,122	\$15,489,30
Annual Valuation Payroll	11,988,122	15,489,302
Expected Annual Payroll in Contribution Year	1,103,020	16,191,52
Total Annualized Benefits		
Retirees & Beneficiaries	10,246,591	9,827,684
Terminated Vested Members	712,480	713,692
B. Assets (Market Value)		Ī
Cash and Cash Equivalents	\$ 3,365,713	\$ 3,132,39
US Government Bonds & Notes	58,916,656	58,710,59
Corporate Bonds	-	
Mortgage/Asset-Backed Securities	-	
Common & Preferred Stocks	45,999,319	39,403,236
Mutual Funds	44,328,310	40,664,268
Net Receivables & Payables	187,766	374,999
Total	152,797,764	142,285,489
Actuarial Value	152,797,764	142,285,489
Assets include:		
Accumulated active member contributions	4,304,846	4,843,040
(with interest if applicable)		
C. Actuarial present value of accrued benefits		
(i) Vested accrued benefits		
Retired members and benefitciaries	120,270,323	116,187,992
Terminated members	5,422,368	5,177,90
Active members (includes non-forfeitable members		
contributions of 4,304,846 and 4,843,046)	43,410,229	35,615,33
Total	169,102,920	156,981,23
(ii) Non-vested accrued benefits	0	1,959,63
(iii) Total actuarial p.v. of accrued benefits	169,102,920	158,940,86
(iv) Actuarial p.v. of accrued benefits at begin. of year(v) Changes attributable to:	158,940,864	154,689,33
 (v) Changes attributable to: Amendments 	0	
Amendments Assumption change	0 34,999,724	62,02
Operation of decrements	(12,580,731)	16,515,53
Benefit payments	(12,256,937)	(12,326,03
Other	(12,230,937) none	(12,520,03 nor
(vi) Net change (PVAB measurement Method Change)	10,162,056	4,251,52
(vii) Actuarial p.v. of accr. benefits at end of year	169,102,920	158,940,86
(vii) Actuariai p.v. of acci, benefits at end of year	103,102,320	130,940,80



	COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS	October 1, 2017	October 1, 2016
C.	Liabilities- Actuarial Present Value of Future Benefits		
	1. Active Members		
	Service Retirement Benefits	\$40,972,102	\$46,364,663
	Termination Benefits	3,210,563	630,461
	Disability Benefits	37,250	429,157
	Preretirement Death Benefits	89,157	959,225
	Total Actives	44,309,072	48,383,506
	2. Inactive Members		
	Service Retirees & Beneficiaries	120,270,323	116,187,992
	Terminated Vested Members	5,422,368	5,177,905
	Total Inactive Members	125,692,691	121,365,897
	3. Total Present Value for All Members	170,001,763	169,749,403
	Total Present Value of:	, ,	. ,
	Future Salaries	12,051,055	137,886,030
	Future Employee Contributions	482,042	5,515,441
	Future Contributions from Other Sources	16,721,957	21,948,473
	Derivation of Current Employer		
	Unfunded Actuarial Accrued Liability (UAAL)		
a.	Total UAAL for Prior Valuation Date	\$19,743,378	\$20,359,518
b.	Employer Normal Cost for this period	493,258	590,018
с.	Interest acccrued on (a) and (b)	1,416,564	1,466,467
d.	Contributions for this period	8,039,385	2,142,182
e.	Interest accrued on (d)	281,378	74,976
f.	Changes due to:		
	Plan Amendment	0	0
	Assumption Changes	0	10,105
	Asset Method	0	0
	Actuarial (Gain) Loss	3,190,784	(465,572)
g.	Total Current UAAL: a+b+c-d-e+f	16,523,221	19,743,378



COMPARATIVE SUMMARY OF PRIM	ICIPAL VALUATION RESULTS	October 1, 2017	October 1, 2016		
D. Pension Cost					
Entry Age Normal Cost for: Service Retirement Benefits Vesting Benefits Disability Benefits Preretirement Death Benefits Total Actives		\$98,698 7,542 1,836 3,784 111,860	\$919,513 77,171 15,429 34,486 1,046,599		
Administrative Expenses		66,231	66,231		
Total Normal Cost		178,091	1,112,830		
Payment Required to Amortize U Accrued Liability	nfunded Actuarial	7,456,922	6,439,869		
Total Contribution at Valuation D	ate (EE + ER)	7,635,013	7,552,699		
Employer Contribution Adjusted Payments and Interest to Next Fo % of Expected Payroll		8,422,270 763.56%	7,727,453 47.73%		
Amount Expected to be Contribu % of Expected Payroll	ted by Members Next FY	44,121 4.00%	647,661 4.00%		
E. Past Contributions- For the Fiscal	Years Ended September 30 of 2	2016 and 2017			
Required Contribution Determine by the Plan Sponsor by Members Actual Contribution for the Fiscal by the Plan Sponsor		<u>October 1, 2015</u> \$7,967,400 \$696,806 <u>9/30/2017</u> 8,039,385	<u>October 1, 2014</u> \$2,049,942 \$721,447 <u>9/30/2010</u> \$2,142,182		
by Members		624,821	\$629,206		
F. Net experience (gain) loss during	year:	\$3,190,784	(\$465,572		
 G. 1. Plan to Amortize Unfunded Actuarial Accrued Liability Payments determined to fully amortize all of the Unfunded Actuarial Accrued Liability by October 1, 2018. 2. Schedule Illustrating the Amortization of the Unfunded Actuarial Accrued Liability (UAAL) 					
	Year	Projected UAAL			
	2017 (peak) 2018 2019 2020 2021 2022	\$16,523,221 \$8,135,927 \$0 \$0 \$0 \$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
9/30/2017	2.8%	3.6%
9/30/2016	3.5%	3.4%
9/30/2015	4.5%	3.4%

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

Year Ended	Actual	Assumed
9/30/2017	10.39%	7.00%
9/30/2016	9.99%	7.00%
9/30/2015	-0.19%	7.00%

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

Valuation Date	Total Payrol	
9/30/2007	24,026,644	
9/30/2008	21,609,264	
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	
Total % Increase Last 7	Fen Years	-50.10%
Annual % Increase		-6.72%
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

