BOARD OF PUBLIC WORKS



BUDGET MEETING April 24, 2018

This presentation is available on the Borough's web site at www.parkridgeboro.com

BOARD OF PUBLIC WORKS

Dr. Charles Moore, President John D. Pouletsos, Vice President Matthew Levinson Jeff Rutowski David O'Sullivan Tom Farinaro, Council Liaison

OPERATIONS MANAGEMENT STAFF

William Beattie, Director of Operations Paul Longo, General Supervisor Electric Distribution Christopher O'Leary, General Supervisor Water & Sewer Peter Wayne, General Supervisor of Public Works Angelo Dell'Armo, Project Engineer

Park Ridge Operations Supervisors



William Beattie Director of Operations



Paul Longo Supervisor of Electric Dist.



Peter Wayne Supervisor of Public Works



Angelo Dell'Armo Project Engineer



Christopher O'Leary Supervisor of Water & Sewer

Utility and Public Works Shared Services

- Joint Managed Contract Request For Proposals for Wholesale Power Supply – Eight NJ Municipal Electric Utilities (Park Ridge, Seaside Heights, Lavallette, South River, Milltown, Butler, Madison, Pemberton) have joined together and are using a managed contract approach to procure wholesale power. This has resulted in lower energy costs and this savings is being passed along to our customers.
- <u>**Tri-Boro Fuel Depot**</u> Unleaded and Diesel fueling station shared with Montvale and Woodcliff Lake.
- <u>Sewer Flusher</u> We joined with Emerson and in 2010 we received a new Sewer flusher truck at no cost through a grant that was applied for through Bergen County. Emerson, Park Ridge and Montvale use this sewer flusher.
- <u>Sewer Camera</u> Shared with several towns in the Pascack Valley for video inspection of sewer mains.

- <u>Public Power Association of New Jersey (PPANJ)</u> Electric Department is a member of this service association comprised of all nine municipal electric utilities in New Jersey and Sussex Rural Electric Cooperative. Benefits include:
 - Share legal, engineering, administrative and consulting costs to monitor and act on both state and federal regulatory matters.
 - Share purchase of low-cost hydroelectric power from federally-funded projects on the St. Lawrence.
 - Joint power proposal contracts.
- <u>New Jersey Public Power Authority (NJPPA)</u> Through a group effort of all the NJ municipalities owning electric utilities, in late 2015 we were able to pass legislation which was signed by the Governor that enabled us to form a NJ Public Power Authority. The Authority was formed in 2017 and Park Ridge became a member. We recently hired an new Executive Director and now are starting to implement shared services for our power supply management and energy purchasing.

- <u>American Public Power Association (APPA)</u> Park Ridge Electric Department is a member of National APPA, comprised of municipally-owned electric utilities throughout the country. The main function this organization provides is for the monitoring and support for regulatory matters that could affect municipal electric utilities. They also provide educational materials and training.
- <u>New Jersey American Water Works Association (NJAWWA)</u> Park Ridge Water Department is a member of the New Jersey AWWA, comprised of water utilities and professionals in New Jersey. This organization provides support and training for the water utilities. Also monitors and provides guidance to the New Jersey Legislators to promote public health and welfare in the provision of drinking water of unquestionable quality and sufficient quantity.
- <u>New Jersey Water Association</u> Park Ridge Water Department is a member of this organization which is comprised of the smaller water utilities in New Jersey. This organization provides support and free training programs for the water department staff. Because most of our staff have obtained their operator's licenses, this organization provides an excellent tool for the employees to keep up with their required continuing education credits at a minimal cost. They also provide additional monitoring and guidance for regulatory issues in New Jersey.

FINANCE DEPARTMENT STAFFING

Position	Employee	Years of Service		
CFO/Utility Treasurer	Open			
Asst. Director of Finance/Treasurer	Open			
Utilities Collection Supervisor	Nancy Russell	23		
Principal Account Clerk	Liz Maggio	12		
Senior Cashier	Joseph Barnes	20		
Finance (Tax Collector)	Jessica Mazzarella	15		
Senior Account Clerk	Thomas Mazzarella	7		
Payroll/Finance Clerk	Sharon Browne	1		

* 20 years of financial experience prior to employment with Park Ridge ** 30 years of financial experience prior to employment with Park Ridge

Average Years of Service: 13

Borough Office Staff



Pictured left to right: Anna Piantino, Lori Woods, Jess Mazzarella, Joe Barnes, Elizabeth Tallman, Tom Mazzarella, Tonya Tardibuono, Elena Rega, Magdalena Giandomenico, Sharon Browne, Julie Falkenstern, Liz Maggio, Karen Prezant, Nancy Russell

ROADS, GROUNDS, VEHICLE MAINTENANCE

STAFFING

Position	Employee	Years of Service
General Supervisor	Peter Wayne	27
Road Supervisor	Bill Diedtrich	26
Senior Road Repairer	John Woods	13
Road Repairer	Joseph Zuccaro	10
Road Repairer	Jason Coughenour	10
Road Repairer	Everett Sayers	5
Laborer	Ryan Witham	3
Laborer	Kevin Reynolds	1
Mechanic	Ken Nibbling	14
Buildings and Grounds	Christopher Wheeler	3*

* 14 years Public Works experience prior to employment with Park Ridge

Average Years of Service: 11

Park Ridge DPW Staff



Pictured left to right: Christopher Wheeler, Joe Zuccaro, John Woods, Ken Nibbling, Everett Sayers, Ryan Witham, Kevin Reynolds, Jason Coughenour, Peter Wayne, (Not Pictured: Bill Diedtrich)

ROADS, GROUNDS, VEHICLE MAINT 2018 PROJECTS

- Recycling Center operating hours on Saturdays from 9AM-2PM all year.
- Capital budget includes funds to purchase a front end loader to replace a 2000 model.
- Capital budget includes funds to purchase plowing and landscaping equipment.
- Continue to work to improve the turf conditions in the parks and ballfields.
- Continue to process approximately 1,200 tons (2,400,000 lbs.) of recyclables and refuse delivered by residents to the Borough's recycling facility.
- Over 8,350 tons of total materials recycled in Park Ridge including curbside pickup and business recycling.
- Continue to maximize the use of Borough equipment and personnel to save recycling and solid waste costs.
- Continue to implement improved recycling and solid waste services.
- Continue employee-training programs.

WATER AND SEWER DEPARTMENT STAFFING

Position	Employee	Years of Service
General Supervisor	Chris O'Leary	3*
Water Supervisor	Ken Reynolds	32
Senior Water Repairer	Dan Boyle	25
Water Repairer	Mark Gronbeck	16
Water Repairer	Kevin Origoni	6
Water Laborer	Paul Hurley	3
Water Laborer	Mike Rasulo	2
Sewer/Water Repairer	Kevin Altomare	31

* 19 years experience prior to coming to Park Ridge

Average Years of Service: 15

Park Ridge Water Department Staff



Pictured left to right: Mike Rasulo, Kevin Altomare, Kevin Origoni, Anthony Confreda, Paul Hurley, Mark Gronbeck, Dan Boyle, Ken Reynolds, Chris O'Leary

<u>SEWER</u> 2018 PROJECTS

- Continue aggressive grease trap inspection program.
- Analysis of potential sources of infiltration and inflow
- Replace worn out sewer manholes.
- Utilize sewer camera to perform internal visual inspections of our sewer collection system.

WATER 2018 PROJECTS

- Well #21 "Test Well" installed and tested. Woodcliff Lake has provided an easement for permanent site to build pumping and treatment facility. We are now in the process of designing the facility and obtaining the necessary NJDEP permits (\$900,000).
- Complete the last stages of the upgrade to the Well #10 Treatment Facility (\$220,000).
- Complete the rehabilitation of the Well #7 pumping facility (\$100,000).
- Complete the installation of a Photo-Catalytic Oxidation treatment system for the removal of unregulated contaminant 1,4-Dioxane at Well 17. System will be online by June 1 (\$450,000).
- Replacement of a water main on Glen Road (\$800,000).
- Replace arsenic removing media at the Well 13 treatment facility (\$75,000).
- Carbon replacement at the Well #3 treatment facility (\$30,000).
- Continue program to hire contractor to test and exercise street valves.
- Contract for semi-annual leak detection survey.
- Continue employee-training programs.

WATER Building for the Future

2019 System Improvements

• Construct Well #21 pumping facility - \$900,000

2020 System Improvements

• Water distribution improvements - \$150,000

2021 System Improvements

• Water distribution improvements - \$150,000

Water Dept Annual Numbers (2015-2017)							
	Gallons Billed						
2017	632,199,000						
2016	714,305,000						
2015	689,133,000						
Revenu	Revenue (from Water Sales)						
2017	2,810,529						
2016	3,303,653						
2015	3,001,795						
Prec	cipitation (inches)						
2017	45.85						
2016	32.09						
2015	31.55						

	WATER UTILITY BUDGET			
A. REVENUES	2018 BUDGET	2017 MO	DIFIED BUDGET	2017 ACTUAL
1. SURPLUS	528,355		604,542	604,542
2. RENTS	2,825,000		2,950,000	2,848,255
3. RENTS FROM RATE INCREASE	105,990		0	0
4. MISCELLANEOUS	246,000		280,000	246,694
5. WCL PROJ DEBT PRINCIPAL	65,508		64,208	64,208
6. RESERVE FOR HANDY & HARMON SETTLEMENT	550,000		0	0
TOTAL REVENUES:	\$4,320,853		\$3,898,750	\$3,763,699
B. OPERATING EXPENSES 1. SALARY AND WAGES	1,211,209		1,174,500	1,163,534
2. OTHER EXPENSES	1,664,000		1,496,500	1,458,723
3. GROUP INSURANCE EMPLOYEES	303,849		304,500	285,839
4. CAPITAL IMPROVEMENT FUND	5,000		5,000	5,000
5. CAPITAL OUTLAY	150,000		150,000	116,580
6. BOND PRINCIPAL	120,000		120,000	120,000
7. BOND ANTICIPATION NOTES/CAPITAL NOTES	1,300		0	0
8. INTEREST ON BONDS	50,255		32,703	32,703
9. INTEREST ON NOTES	12,700		15,000	15,000
10. DEFERRED CHARGES/EMERGENCY AUTH	569,540		121,500	121,500
11. PUBLIC EMPLOYMENT RETIREMENT SYSTEM	140,000		120,000	116,571
12. SOCIAL SECURITY	93,000		93,000	85,150
TOTAL EXPENSES:	\$4,320,853		\$3,632,703	\$3,520,600

	Surplus
\$868,29	0 January 1, 2017
\$659,75	8 December 31, 2017
\$112,10	3 2017 Appropriation Reserves

WATER UTILITY BUDGET (2014-2018)

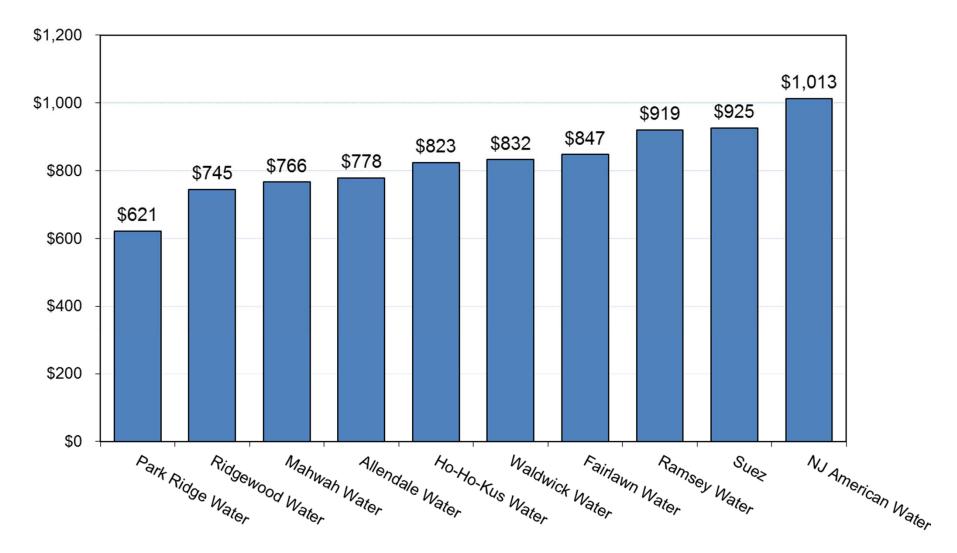
			1	7 MODIFIED	1	6 MODIFIED	1	5 MODIFIED	14 MC	DIFIED
REVENUES	18 BUDGET			BUDGET		BUDGET		BUDGET	BUI	DGET
SURPLUS	\$	528,355	\$	604,542	\$	407,266	\$	399,400	\$2	267,512
RENTS		2,825,000		2,950,000		2,885,995		2,805,000	2,8	805,000
RENTS FROM RATE INCREASE		105,990		-						
MISCELLANEOUS		246,000		280,000		250,000		250,000	2	230,000
WCL CAPITAL SURCHARGE		-		-		-		-	3	89,772
CAPITAL SURPLUS		-		-		-		71,057		
WCL PROJ BOND PRINCIPAL - CURRENT		65,508		64,208		62,418		89,102		26,842
WCL PROJ BOND PRINCIPAL - PRIOR		-		-		-		-		25,051
RESERVE FOR HANDY & HARMON SETTLEMENT		550,000		-		-		-		-
TOTAL REVENUES	\$	4,320,853	\$	3,898,750	\$	3,605,679	\$	3,614,559	\$ 3,7	44,177
OPERATING EXPENSES										
SALARY AND WAGES		1,211,209		1,194,500		1,244,800		1,222,000	1,1	77,998
OTHER EXPENSES		1,664,000		1,671,500		1,597,000		1,542,000	1,5	588,500
GROUP INSURANCE EMPLOYEES		303,849		354,500		308,000		308,000	3	869,800
CAPITAL OUTLAY		150,000		150,000		38,000		165,000	2	220,000
SOCIAL SECURITY		93,000		93,000		92,100		91,000		90,000
CAPITAL IMPROVEMENT FUND		5,000		5,000		5,000		5,000		25,000
PUBLIC EMPLOYMENT RETIREMENT		140,000		140,000		136,500		113,000	1	02,525
BOND PRINCIPAL		120,000		120,000		115,000		110,000	1	10,000
BOND ANTICIPATION NOTES/CAPITAL NOTES		1,300		-		-		-		-
BOND INTEREST		50,255		33,750		35,941		37,059		38,854
NOTES INTEREST		12,700		15,000		11,838		-		-
DEFERRED CHARGES/EMERGENCY AUTH		569,540		121,500		21,500		21,500		21,500
TOTAL EXPENSES	\$	4,320,853	\$	3,898,750	\$	3,605,679	\$	3,614,559	\$ 3,7	44,177

BOROUGH OF PARK RIDGE Existing Bonded Service 2012 & 2013 Water Utility Bonds

		2012	Bonds			2013	Bonds		Total
Year	Principal	Interest	Total	Outstanding	Principal	Interest	Total	Outstanding	Outstanding
2017				875,000				432,000	1,307,000
2018	80,000	17,786	97,786	795,000	40,000	13,418	53,418	392,000	1,187,000
2019	80,000	16,186	96,186	715,000	40,000	12,618	52,618	352,000	1,067,000
2020	85,000	14,586	99,586	630,000	40,000	11,818	51,818	312,000	942,000
2021	85,000	12,886	97,886	545,000	40,000	10,618	50,618	272,000	817,000
2022	85,000	11,186	96,186	460,000	45,000	9,418	54,418	227,000	687,000
2023	90,000	9,486	99,486	370,000	45,000	8,068	53,068	182,000	552,000
2024	90,000	7,686	97,686	280,000	45,000	6,718	51,718	137,000	417,000
2025	90,000	5,886	95,886	190,000	45,000	5,255	50,255	92,000	282,000
2026	95,000	4,086	99,086	95,000	45,000	3,680	48,680	47,000	142,000
2027	<u>95,000</u>	<u>2,090</u>	<u>97,090</u>	-	<u>47,000</u>	<u>1,880</u>	<u>48,880</u>	-	-
Total	875,000	101,864	976,864		432,000	83,491	515,491		

BOROUGH OF PARK RIDGE							
Proposed	l Water Utility Bo	nds - Stand Alon	e Schedule				
	Proposed 1	Bonds Dated May	y 15, 2018				
	\$790,000	; 13 Years; 3.50%	Interest				
Year	Principal	Interest	Total				
2018		13,825	13,82				
2019	50,000	26,775	76,77				
2020	50,000	25,025	75,02				
2021	55,000	23,188	78,18				
2022	55,000	21,263	76,26				
2023	55,000	19,338	74,33				
2024	60,000	17,325	77,32				
2025	60,000	15,225	75,22				
2026	60,000	13,125	73,12				
2027	65,000	10,938	75,93				
2028	65,000	8,663	73,66				
2029	70,000	6,300	76,30				
2030	70,000	3,850	73,85				
2031	75,000	1,313	76,31				
	\$ 790,000	\$ 206,150	\$ 996,15				
	Average Annual Cost:						
Increa	se over 2018 Wate	-	76,62				

Comparison of Annual Water Bills Based on Average Customer Using 34,000 Gallons per Quarter



ELECTRIC DEPARTMENT STAFFING

Position	Employee	Years of Service		
General Supervisor	Paul Longo	14(*16)		
Line Supervisor	James Leichtnam	12(**18)		
Senior Line Worker	Shane Geanoules	9(***5)		
Line Worker	Paul Neumann	31		
Line Worker	Silvestre Jose	8(****6)		
Line Worker	OPEN			
Electrician/Line Worker	Bob Murken Jr.	23		
Meter Reader	Anthony Confreda	2		

* 16 years experience with PSE&G prior to employment with Park Ridge **18 years experience with PSE&G prior to employment with Park Ridge ***5 years experience with PSE&G prior to employment with Park Ridge ****6 years experience with PSE&G prior to employment with Park Ridge

Average Years of Service: 14



Pictured left to right: Paul Neuman, Silvestre Jose, Shane Geanoules, Jim Leichtnam, Bob Murken, Paul Longo,

ELECTRIC PROJECTS

- Perform utility pole testing and treatment (\$85,000).
- Perform power line clearance tree trimming (\$150,000).
- Install new electric systems for new developments in Park Ridge.
- Continue using Electric Department staff expertise for municipal installations (street and recreational lighting, computer networks, etc.).
- Continue employee-training programs.

ELECTRIC Building for the Future

2019 System Improvements

Install electric distribution infrastructure for downtown redevelopment and other projects.

2020 System Improvements

Replace Conductors for Sub-transmission Circuit 2601 which feeds from Mill Road substation to the Brae Blvd substation - \$350,000

2021 System Improvements

Purchase and install Vacuum Circuit Breakers to replace the two existing oil circuit breakers OCB-3 and OCB-4 at Mill Rd. Substation - \$125,000

2021-2022 System Improvements

Purchase and Install Bus No. 2 Low Side Main Circuit Breaker, Main Disconnect Switches and Associated Bus - \$165,000

ELECTRIC Building for the Future

2022-23 System Improvements

Prepare Specifications, Bid, Purchase and Install No. 2 Main Power Transformer at Mill Road Substation - \$1,975,000

2024 System Improvements

Increase Bus Capacity and Main Disc. Switches on Bus No.1 & 2 at the Mill Road Substation - \$400,000

2025 System Improvements

Purchase and Install Bus No. 1 Low Side Main Circuit Breaker, Main Disconnect Switches and Associated Bus System at the Mill Road Substation -\$195,000

2026 System Improvements

Prepare Specifications, Bid, Purchase and Install No. 1 Main Power Transformer at Mill Road Substation - \$2,375,000

ELECTRIC DEPARTMENT EXTRA BENEFIT TO MUNICIPALITY

- In Lieu of Gross Receipts and Franchise Tax \$500,000
- Payment in Lieu of Taxes \$155,000
- Street lighting (\$200,000 savings to municipal budget)
- Discounted electric rates for municipal facilities
- Tree trimming
- Miscellaneous electrical and telecommunications work in municipal facilities
- Senior Citizen rate savings
- Computers system purchases and maintenance
- Holiday decorations/banners
- Use of equipment during snow operations
- Maintaining traffic signals
- Sports lighting bulbs and maintenance





LED Street Lights



EV Car Charging Stations

\$25,000 in grant funding received to install three EV charging station. PR Electric, working with Green Team obtained funding. Beginning installation in next several weeks.



Ford Fusion Hybrid



Ford Escape Hybrid



Toyota Camry Hybrid

The Park Ridge Water and Electric Conservation Measures

- <u>Bi-Annual Leak Detection for Entire Water System:</u> Twice a year, the Park Ridge Water Department hires a leak detection consultant to survey the entire water system using specialized equipment to look for distribution system leaks. After each session, a report is generated and the Park Ridge Water Department repairs the leaks. This results in our system having a very low unaccounted-for water measurement (Gallons Pumped vs. Gallons Billed)
 - United Water 2013 26%
 - Park Ridge Water Department's 2016 Unaccounted-for-Water 6%
 - Park Ridge Water Department's 2017 Unaccounted-for-Water 15%
- <u>Electric and Water SCADA Systems:</u> The Park Ridge Electric and Water Systems are monitored by a supervisory control and data acquisition system (SCADA) which allows us to monitor the real time water and electric system demands. By closely monitoring the demands we can see if there are potential water main breaks (e.g. high demand in the middle of the night).

The Park Ridge Water and Electric Conservation Measures

- <u>Water System Peak Shaving Power Save Mode:</u> We have built into our water system control program, a setting where we can shut down the wells and run the systems off the tank pressure for several hours during periods of peak electric use. By shutting the wells off during the peak periods, our electric system load factor is improved and our capacity charges are reduced.
- <u>Electric Load Forecasting Service:</u> For the past few years, we have paid for a daily grid load forecasting service. Based on weather and other factors in our regional power grid (PJM), we are advised of days we should conserve energy. By reducing load on these days, we can save on the following year's bulk power costs.

The Park Ridge Utility Garage Solar System

(as of May 2017)



- <u>Cost of installation (including engineering)</u>: \$195,000
- <u>The construction for the project started in March 2010 and was</u> completed and went online in June 2010
- <u>Total DC capacity for the system:</u> 29.7 KW
- <u>Financial benefits as of May 2017:</u>
 - ▶ \$29,700 rebate received from the NJ Office of Clean Energy
 - ⋟ \$56,093 received for solar energy renewable credits (SRECs)
 - > \$ 30,336 in reduced electric costs

> \$ 116,129 in total benefits

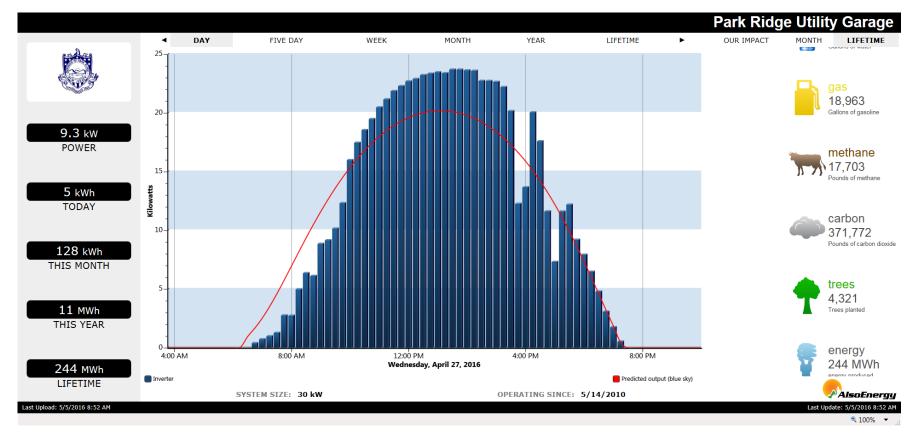
• Total electrical energy generated to date: 218,270 kilowatt-hours

The Park Ridge Utility Garage Solar System



- <u>Environmental benefits due to the generation of clean renewable</u> <u>energy</u>: To date, the solar system has reduced the amount of carbon dioxide emissions equal to:
 - > The amount 32.4 passenger vehicles would create in a year.
 - The amount that would have been generated from the electricity used in 16.2 homes in a year.
 - The amount that would have been reduced by the growth of 3,975 tree seedlings over ten years.

Park Ridge Real Time Solar Output Web Page



Web page available on the Borough's web site at <u>www.parkridgeboro.com</u> in the Electric Utility section.

Electric Dept Annual Numbers (2013-2018)								
Purchase of Curre	ent	<u>(\$)/KWH</u>						
2018 Budget	\$6,867,000	\$ 0.098						
2017	\$6,651,427	\$ 0.104						
2016	\$6,679,716	\$ 0.097						
2015	\$6,837,558	\$ 0.097						
2014	\$7,377,195	\$ 0.106						
2013	\$7,190,095	\$ 0.100						
Energy Billed	(KWH's)							
2018 Budget	60,303,625							
2017	60,303,625							
2016	63,243,196							
2015	65,854,919							
2014	65,939,991							
2013	65,893,133							
Revenue (from E	nergy Sales)							
2018 Budget	9,584,872							
2017	9,253,074							
2016	9,897,815							
2015	10,074,473							
2014	9,765,882							
2013	9,853,268							
Heating/Cooling	Degree Days							
	HDD	<u>CDD</u>						
2017	5,055	1,159						
2016	5,051	1,355						
2015	5,353	1,284						
2014	5,696	1,015						
2013	4,752	1,339						

	ELECTRIC UTILITY BUDGET							
A. REVENUES	2018 BUDGET	2017 MODIFIED BUDGET	2017 ACTUAL					
1. SURPLUS	436,296	528,350	528,350					
2. LIGHT AND POWER	9,225,000	9,835,000	9,239,750					
3. ADDL REVENUE - POWER ADJUSTMENT	359,872	0	0					
4. MISCELLANEOUS	22,000	30,000	22,348					
TOTAL REVENUES:	\$10,043,168	\$10,393,350	\$9,790,448					
B. OPERATING EXPENSES								
1. SALARY AND WAGES	1,149,371	1,106,100	1,078,330					
2. OTHER EXPENSES	674,000	518,500	475,570					
3. PURCHASE OF CURRENT	6,730,674	6,686,000	6,651,427					
4. GROUP INSURANCE EMPLOYEES	238,829	259,000	223,889					
5. IN LIEU FR & GR RECEIPT TAXES	500,000	500,000	500,000					
6. PAYMENT IN LIEU OF TAXES-CURRENT	155,000	155,000	155,000					
7. CAPITAL IMPROVEMENT FUND	5,000	0	0					
8. CAPITAL OUTLAY	30,000	75,500	60,598					
9. BOND/NOTE PRINCIPAL	270,000	265,000	265,000					
10. INTEREST ON BONDS	36,687	29,493	29,493					
11. INTEREST ON NOTES	8,500	5,065	5,065					
12. DEFERRED CHARGES	24,107	25,500	25,500					
13. PUBLIC EMPLOYEES RETIREMENT SYSTEM	135,000	116,000	115,673					
14. SOCIAL SECURITY	86,000	87,000	78,091					
TOTAL EXPENSES:	\$10,043,168	\$9,828,158	9,663,636					

ELECTRIC UTILITY BUDGET	EL	ECTR	RIC U	TILIT	TY BU	DGET
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Surplus
\$860,117 January 1, 2017
\$657,939 December 31, 2017
\$164,522 2017 Appropriation Reserves

ELECTRIC UTILITY BUDGET (2014-2018)

		17	7 MODIFIED	10	6 MODIFIED	1	5 MODIFIED	14 MODIFIED
REVENUES	 8 BUDGET		BUDGET		BUDGET		BUDGET	BUDGET
SURPLUS	\$ 436,296	\$	528,350	\$	575,870	\$	514,598	\$ 945,480
LIGHT AND POWER	9,225,000		9,835,000		9,872,729		9,849,000	9,840,000
ADDITIONAL PURCHASE POWER ADJ.	359,872		-		-		-	180,000
MISCELLANEOUS	22,000		30,000		30,000		22,000	36,000
CAPITAL SURPLUS	-		-		-		36,841	-
FEMA NOTE REIMBURSEMENT	-		-		-		-	52,427
FEMA REIMBURSEMENT	-		-		-		-	108,673
INSURANCE PROCEEDS	 -		-		-		-	25,983
TOTAL REVENUES:	\$ 10,043,168	\$	10,393,350	\$	10,478,599	\$	10,422,439	\$11,188,563
OPERATING EXPENSES								
PURCHASE OF CURRENT	\$ 6,730,674	\$	6,686,000	\$	6,754,000	\$	7,126,000	\$ 7,840,000
SALARY AND WAGES	1,149,371		1,106,100		1,071,900		1,133,000	1,119,000
OTHER EXPENSES	674,000		518,500		497,000		670,000	636,500
GROUP INSURANCE EMPLOYEES	238,829		259,000		286,000		286,000	360,200
IN LIEU FR & GR RECEIPT TAXES	500,000		500,000		500,000		500,000	500,000
PAYMENT IN LIEU OF TAXES-CURRENT	155,000		155,000		155,000		155,000	155,000
CAPITAL OUTLAY	30,000		75,500		175,000		15,000	33,500
CAPITAL IMPROVEMENT FUND	5,000		-		115,000		33,500	-
PUBLIC EMPLOYEES RETIREMENT SYSTEM	135,000		116,000		129,500		107,000	91,994
SOCIAL SECURITY	86,000		87,000		87,000		87,000	85,000
BOND PRINCIPAL	270,000		265,000		240,000		240,000	235,000
BOND INTEREST	36,687		29,493		37,888		44,439	52,198
INTEREST ON NOTES	8,500		5,065		4,811		-	2,244
DEFERRED CHARGES	24,107		25,500		25,500		25,500	25,500
SPECIAL EMERGENCY - HURRICANE SANDY	 -		-		-		-	52,427
TOTAL EXPENSES	\$ 10,043,168	\$	9,828,158	\$	10,078,599	\$	10,422,439	\$11,188,563

BOROUGH OF PARK RIDGE Existing Bonded Service 2007, 2012 & 2013 Electric Utility Bonds

		2007	' Bonds			2012	? Bonds			2013	Bonds		Total
Year	Principal	Interest	Total	Outstanding	Principal	Interest	Total	Outstanding	Principal	Interest	Total	Outstanding	Outstanding
2017				493,000				205,000				40,000	738,000
2018	150,000	19,104	169,104	343,000	100,000	4,100	104,100	105,000	20,000	800	20,800	20,000	468,000
2019	175,000	13,291	188,291	168,000	105,000	2,100	107,100	-	20,000	400	20,400	-	168,000
2020	168,000	6,510	174,510	-									-
Total	493,000	38,905	531,905		205,000	6,200	211,200		40,000	1,200	41,200		

BOROUGH OF PARK RIDGE											
Proposed Electric Utility Bonds - Stand Alone											
		Bonds Dated May									
	\$600,000	\$600,000; 10 Years; 3.25% Interest									
Year	Principal	Interest	Total								
2017											
2018		9,750	9,750								
2019	35,000	18,931	53,93								
2020	50,000	17,550	67,550								
2021	60,000	15,763	75,763								
2022	60,000	13,813	73,813								
2023	60,000	11,863	71,863								
2024	65,000	9,831	74,83								
2025	65,000	7,719	72,719								
2026	65,000	5,606	70,600								
2027	70,000	3,413	73,413								
2028	70,000	1,138	71,138								
	\$ 600,000	\$ 115,375	\$ 715,375								
	Avera	ge Annual Cost:	71,538								
Increase of	over 2018 Light &	6	0.789								

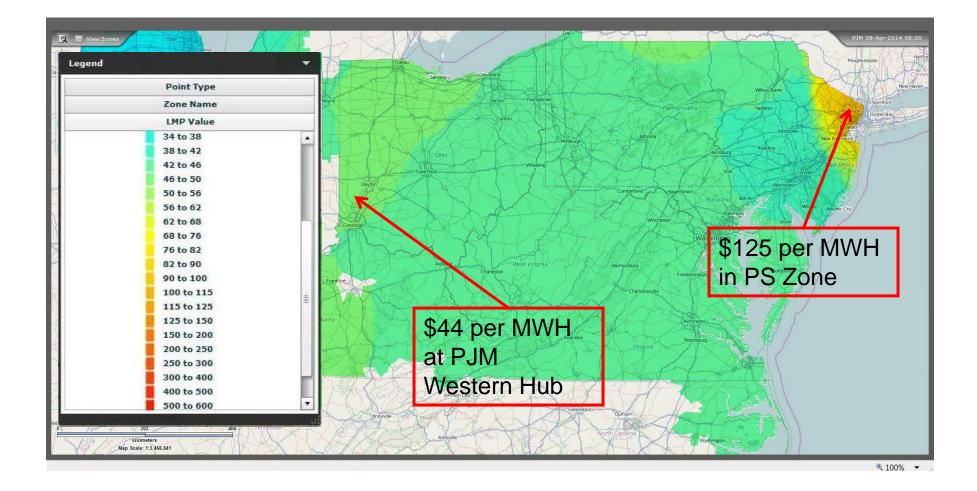
	Wholesale Component Budget Costs Comparison - Updated 1-30-18										
	2011	2012	2013	2014	2015	2016	2017	2018			
Energy	4,841,213	4,816,265	4,510,959	4,631,999	4,224,220	3,849,412	3,469,000	3,005,707			
Capacity	1,141,999	1,089,868	1,781,839	1,540,924	1,271,843	1,600,007	1,589,000	1,504,889			
Transmission	592,446	556,641	789,063	1,093,690	1,374,484	1,165,237	1,609,000	1,987,786			
Others	336,811	265,885	252,300	156,156	205,206	121,409	88,000	128,848			
Total	6,912,469	6,728,660	7,334,161	7,422,769	7,075,753	6,736,065	6,755,000	6,627,230			
		Perc	entage of To	otal Cost Cor	mparison						
	2011	2012	2013	2014	2015	2016	2017	2018			
Energy	70%	72%	62%	62%	60%	57%	51%	45%			
Capacity	17%	16%	24%	21%	18%	24%	24%	23%			
Transmission	9%	8%	11%	15%	19%	17%	24%	30%			
Others	5%	4%	3%	2%	3%	2%	1%	2%			

Energy Costs

Energy costs are what we pay for the energy that is generated at the power plants and then delivered to our substation. The cost is based on our wholesale block purchases along with hourly spot purchases when we need additional energy, and spot sales when we have surplus energy.

June 2018-May 2019					
Date Purchased	Product	Price	Delivery	Company	
3/11/2015	1st Traunch	43.85	PSE&G Zone	Constellation	
10/8/2015	2nd Traunch	36.35	PSE&G Zone	Nextera	
3/3/2016	3rd Traunch	36.95	Hillsdale Node	ВР	
June 2019-May 2020					
Date Purchased	Product	Price	Delivery	Company	
3/3/2016	1st Traunch	33.09	PSE&G Zone	Exelon	
5/11/2016	2nd Traunch	36.45	PSE&G Zone	Exelon	
8/5/2016	3rd Traunch	36.35	Hillsdale Node	Nextera	

Typical PJM Locational Marginal Pricing (LMP) Contour Map



Capacity Cost

Capacity costs are what we pay throughout the year to assure that there is enough power produced in the entire grid during peak hours. Our capacity costs are set through PJM auctions. These auctions allow generators to bid their capacity for power supplied three year in advance. For all customers in our area, the price for capacity is based on the result of the auction in the PSE&G Zone. The following table summarizes the auction results and the effect on our annual costs.

	PJM Rate	Park Ridge
PJM Delivery Year	MW-Day	Annual Cost
June 2012 to May 2013	\$139.73	\$1,020,029
June 2013 to May 2014	\$245.00	\$1,788,500
June 2014 to May 2015	\$170.95	\$1,247,935
June 2015 to May 2016	\$166.51	\$1,215,523
June 2016 to May 2017	\$224.64	\$1,639,872
June 2017 to May 2018	\$205.78	\$1,502,194
June 2018 to May 2019	\$218.98	\$1,598,554
June 2019 to May 2020	\$115.15	\$840,595
June 2020 to May 2021	\$174.85	\$1,276,405
Park Ridge Peak Load	20	MW

Transmission Costs

Transmission costs are what we pay PJM for the operation, maintenance, and expansion of the regional transmission grid. The cost for transmission is regulated by the Federal Energy Regulatory Commission (FERC). FERC has approved a number of large projects for PSE&G and the costs are updated and adjusted each year beginning January 1. Due to these major improvements, our transmission costs have increased significantly over the past few years.

PSE&G announces it will spend \$10 billion on transmission line upgrades



Public Service Electric & Gas at work last year on a high-voltage transmission line in Livingston, part of the North Central Reliability Project. Today, PSE&G announced it would spend \$10 billion over the next five years to upgrade its transmission lines. (StarL-degr file photo)

TRANSMISSION PLAYING LARGER PART IN PSE&G PLANS -- AND CUSTOMER BILLS

TOM JOHNSON | FEBRUARY 21, 2014

In earnings call, PSEG chief says transmission projects now account for more than one-third of its utility's business



PSE&G's investments in upgrading its transmission lines are playing a bigger part in its business plan and its profits. Most likely they also mean higher bills for Public Service Electric & Gas customers.

In a quarterly earnings call, the Newark company yesterday disclosed its expenditures on transmission projects now account for 36 percent of the utility's rate base, up from 28 percent the

previous year. The rate base largely determines what the utility earns from its customers and how much they have to pay.

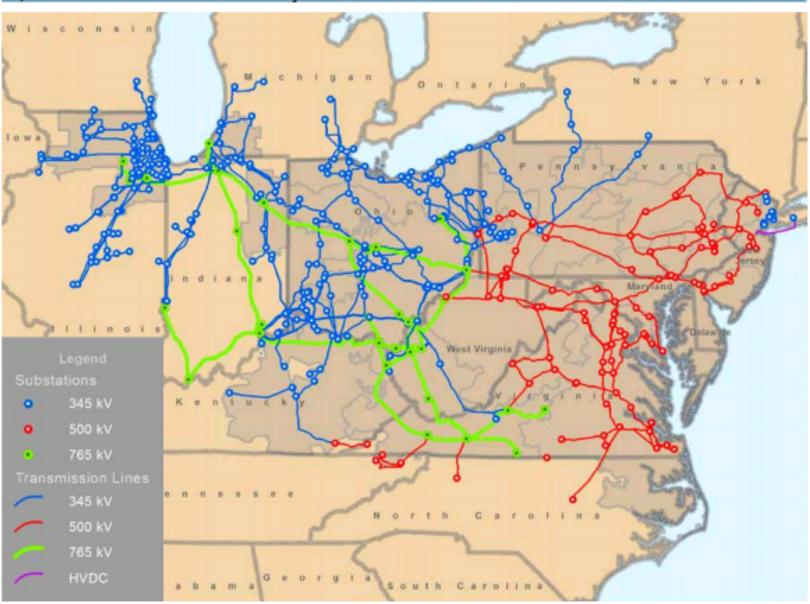
Public Service Electric & Gas today announced a capital investment of \$10 billion over the next five years, mostly to upgrade its high-voltage transmission lines.

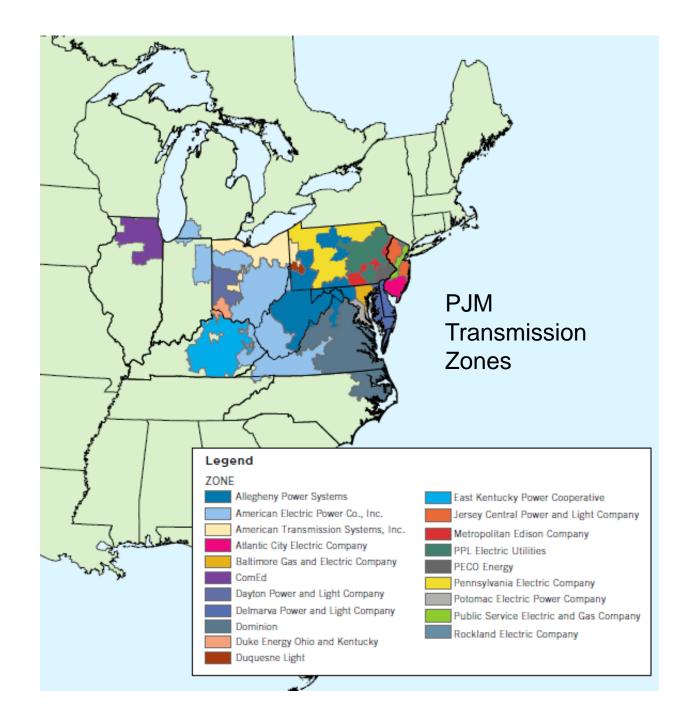
Transmission Costs

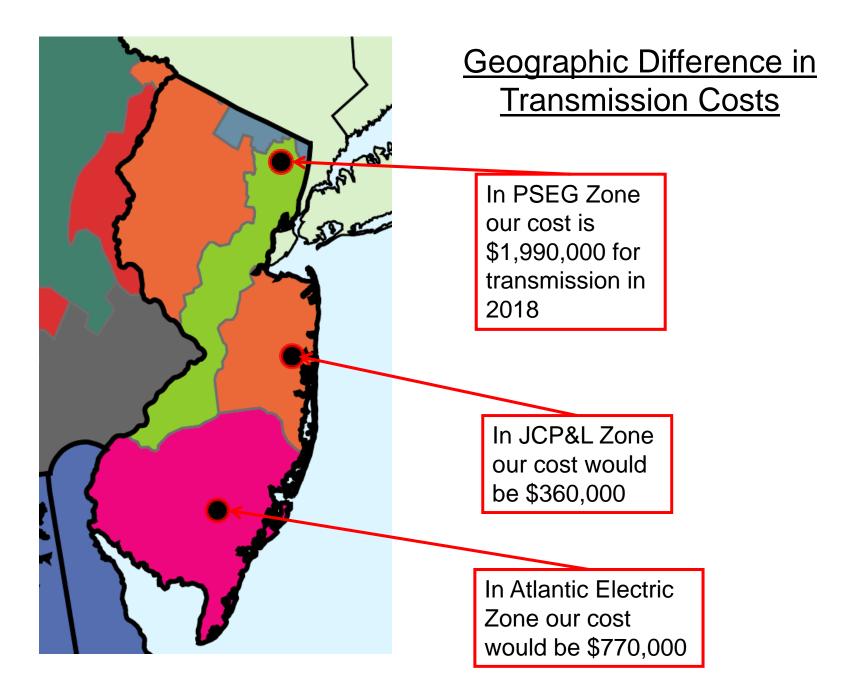
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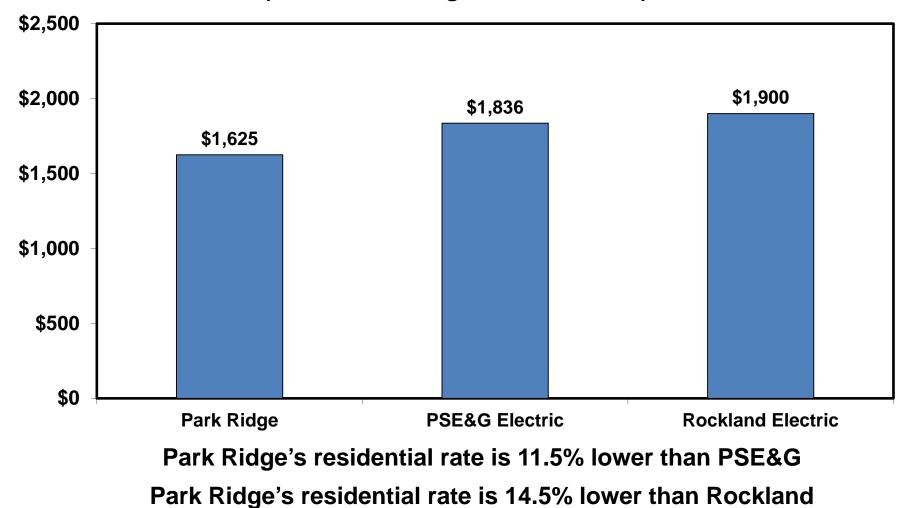
Map 1.1: PJM Backbone Transmission System







Annual Residential Electric Cost Comparison (based on average residential bill)



Possible Rate Action

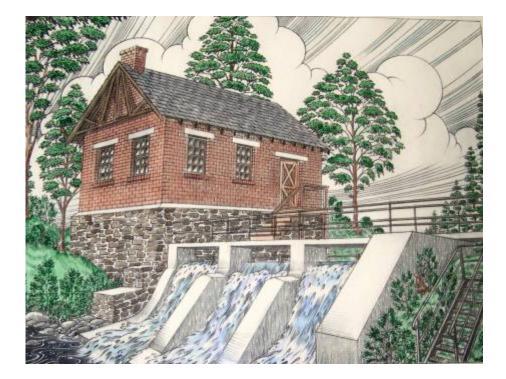
Electric Department Factors:

- Power Adjustment (PA) rate increased on January 1, 2018
- Decrease in this year's wholesale energy costs offset by large increase in transmission costs.
- Capital Outlay has been reduced in 2018 as we will be utilizing previously authorized electric capital reserve funds to purchase these materials
- No increase in base rate expected for 2018.

Water Department Factors:

- Water rate increased by 3% on January 1, 2018
- Increase in water treatment costs.
- No additional increase in rates is expected for 2018.
- Likelihood to see moderate rate increases in upcoming years.

COMMENTS



Questions?