

DISCUSSION ~ DIRECTION
on electric utility rate increases.





ELECTRIC DEPARTMENT – RATES

Key Rate Issues for FY17-FY18

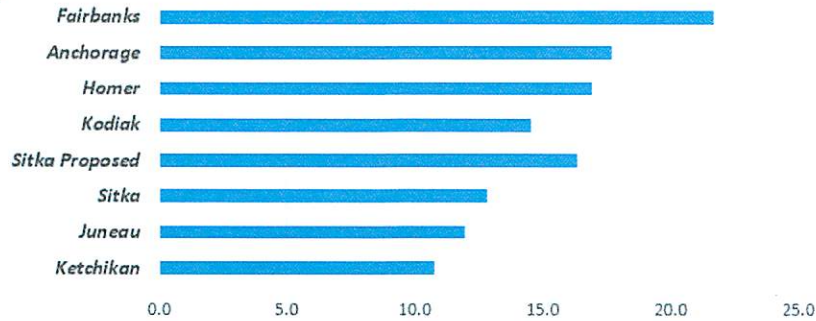
- Since 2015 Rates have leveled to 103-105 million kwhr/yr
- Early analysis shows FY17 Load trending down by 1% to flat
- Range of revenue \$13.9-14.2 m
- Upside – Expenses expected to be under budget
- Existing \$ in Rate Stabilization fund – \$1.65 m
- Balance of undesignated funding required for FY17
 - Early Guess of approx. \$589,000
 - Range of \$200,000 to \$1.2 m
 - Funding source???

Options to Balance the Enterprise Fund

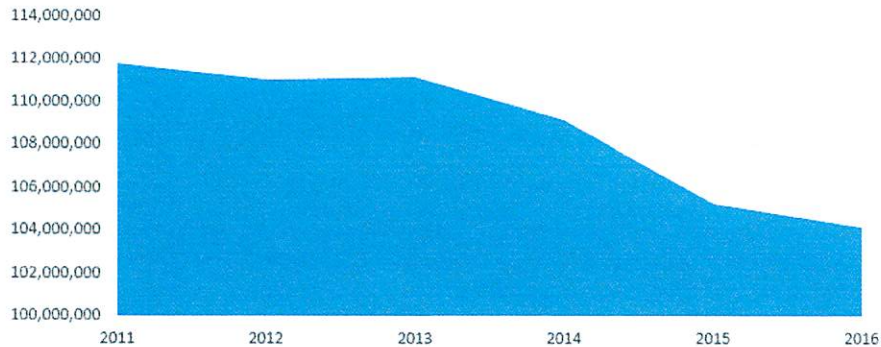
- Rate Increase
- 15% Rate Increase Proposed for FY18
 - ✓ Heat Pumps remain at ½ the cost of fuel oil to operate
 - ✓ Residential rate up from 13 cents to 15 cents
 - ✓ First Tier on General Service Commercial unchanged <500 kwhrs @ 18 cents
 - ✓ Monthly Fees unchanged
 - ✓ Boat Service Tier 2 matches Tier 2 Residential (11% not 15%)
- Early Rate Increase to help balance FY17
 - ✓ Mar 1 FY17 – \$700,000 estimated additional FY17 revenue
 - ✓ Apr 1 FY17 - \$500,000 estimated additional FY17 revenue



COMPARABLE FY17
ALASKA ENERGY RATES



Sitka Historical Load



ELECTRIC ENTERPRISE FUND **FY18** RATE CALCULATOR

INPUTS YOU CAN CHANGE

% Change in FY18 Load (-5% to 5%)	-1%
% Change in FY18 Elect Rates	15.0%
Months of Changed Rate in FY18	100%
Funds from OTHER \$	0
Funds from Rate Stabilization Acct	0
% Reduction in non-labor expense	4%

CALCULATIONS and FIXED

Original Elect Rate \$/kwhr	0.1423
Adjusted Elect Rate \$/kwhr	0.1636
Original KWHrs Sold -	104,156,400
Adjusted KWHrs Sold -	103,114,836
Calculated Electric Revenue (Sales)	16,872,330
Other Revenue (fixed, Federal)	550,394
Funds from "Other" and Rate Stabiliz	0
Operations Costs Labor (fixed)	(4,200,000)
Adjusted Operations Costs, Non Labor	(4,119,400)
Interest and Principal on Loan (AEA)	(614,076)
Interest on Bonds(fixed)	(7,913,517)
Interest on Bonds net of Fed Revenue	(7,363,123)
Bond 25% adder	(1,840,781)
OVERALL Revenue Requirement	(16,909,228)

REQUIRED TARGET IS ZERO **(36,898)**
FOR BOND COVENANT AND CAPITAL PLAN



ELECTRIC DEPARTMENT

Operating a Heat Pump is $\frac{1}{2}$ the Cost of Fuel oil

HEAT PUMP versus FUEL OIL

<u>FUEL OIL</u>	Value	Units
Fuel Oil Heating Value	130,000	btu/gal
Modern Fuel Oil Stove Efficiency	85%	%
Price of Fuel #1 Delivered	2.7	\$/gal
CALCULATED	110,500	btu/gal
CALCULATED	40,926	btu/\$

<u>HEAT PUMP</u>	Value	Units
HSPF (typical Sitka, Fujitsu RLS3)	12.5	
Efficiency	12,500	btu/kw
Cost of Power	0.16	\$/kwhr
CACLULATED	78,125	btu/\$

HEAT PUMP IS 0.523852
THE COST OF FUEL OIL



ELECTRIC DEPARTMENT

RESIDENTIAL CUSTOMERS

<u>RESIDENTIAL</u>	Before Oct-2016	After Oct-2016	Proposed Apr-2017
First 200 kWhrs	0.0858	0.1203	0.1383
Next 800 kWhrs	0.1145	0.1203	0.1383
Over 1000 kWhrs	0.1305	0.137	0.1576
Customer Charge	19.5	20.48	20.48
Typical Residential Monthly kWhrs	\$/mo	\$/mo	\$/mo
1500	193.51	209.28	237.58
2000	258.76	277.78	316.38
Incremental %		7.4%	13.9%
Total % Net Increase from 10/2016			22.3%
	\$/yr	\$/yr	\$/yr
1500	2322.12	2511.36	2850.96
2000	3105.12	3333.36	3796.56



ELECTRIC DEPARTMENT

SMALL COMMERCIAL CUSTOMERS

<u>SMALL COMMERCIAL</u>	Before Oct-2016	After Oct-2016	Proposed Apr-2017
First 500 kWhrs	0.1771	0.186	0.186
Next 500-10000 kWhrs	0.1246	0.1308	0.1504
10,000-100,000	0.1218	0.1279	0.1471
Over 100,000 kWhrs	0.119	0.125	0.1438
Customer Charge	39	40.95	40.95
Typical Commercial Monthly kWhrs	\$/mo	\$/mo	\$/mo
5000	688.25	722.55	810.75
20000	2529.25	2655.55	3033.75
Incremental %		5.0%	14.2%
Total % Net Increase from 10/2016			19.9%
	\$/yr	\$/yr	\$/yr
1500	8259	8670.6	9729
2000	30351	31866.6	36405



ELECTRIC DEPARTMENT

LARGE COMMERCIAL CUSTOMERS

<u>LARGE COMMERCIAL</u>	Before Oct-2016	After Oct-2016	Proposed Apr-2017
First 500 kWhrs	0.1771	0.186	0.186
Next 500-10000 kWhrs	0.1241	0.1303	0.1498
10,000-100,000	0.1213	0.1274	0.1465
Over 100,000 kWhrs	0.1184	0.1244	0.1431
Customer Charge	60	63	63
Typical Commercial Monthly kWhrs	\$/mo	\$/mo	\$/mo
100000	12244.5	12859.85	14764.1
150000	18164.5	19079.85	21919.1
Incremental %		5.0%	14.9%
Total % Net Increase from 10/2016			20.7%
	\$/yr	\$/yr	\$/yr
1500	146934	154318.2	177169.2
2000	217974	228958.2	263029.2



ELECTRIC DEPARTMENT

BOAT SERVICE

<u>BOAT SLIP</u>	Before Oct-2016	After Oct-2016	Proposed Apr-2017
First 150 kWhrs	0.1353	0.142	0.142
All Remaining	0.1353	0.142	0.1576
Customer Charge	8.75	20.48	20.48

Typical Residential Monthly kWhrs	\$/mo	\$/mo	\$/mo
150	29.045	41.78	41.78
300	49.34	63.08	65.42
Incremental %		27.8%	3.7%
Total % Net Increase from 10/2016			32.6%

	\$/yr	\$/yr	\$/yr
1500	348.54	501.36	501.36
2000	592.08	756.96	785.04



ELECTRIC DEPARTMENT

QUESTIONS

2/8/2017

City and Borough of Sitka