

# **ELECTRIC DEPARTMENT** – Ordinance

# AMENDING SITKA GENERAL CODE CHAPTER 15.01 ELECTRIC UTILITY POLICIES

#### 1. Electric Rate Changes

- SGC 15.01.020
- 5% Rate Increase Proposed
- Eliminate one Residential Tier
- Jump in Harbor Monthly Fee to pay for replacement Marine Grade Meters
- Meeting the Bond Covenants
  - ✓ Default not recommended
  - ✓ Specific provisions forces 3<sup>rd</sup> party review of rates and compliance
  - ✓ A default impacts our credit rating
  - ✓ Compliance builds the Working Capital to fund the 10 year plan

#### 2. Other Key Changes to the CODE

- Defines the roles of Administrator, Electric Dir, Finance Dir
- Similar to the Purchasing Ordinance it removes procedural items
  - ✓ Removes sections 15.01.015, 15.01.085 and 15.01.090
  - ✓ Creates separate City Customer Service Procedures
  - ✓ Creates separate Electrical Department Construction Guidelines
- Eliminates the need to hang door hangers prior to disconnecting service.
- Raises other fees to bring them current to todays costs

#### 3. 10 Year Plan Approval (Separate Approval but Integral with Rates)



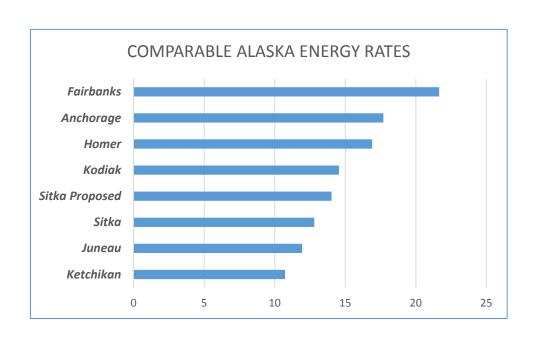
## **ELECTRIC DEPARTMENT – HISTORICAL LOAD**



Historical Load	2011	2012	2013	2014	2015	2016
	111,795,344	111,048,623	111,155,330	109,133,500	105,293,250	104,156,400
note: From CAFR and Finance Dept						



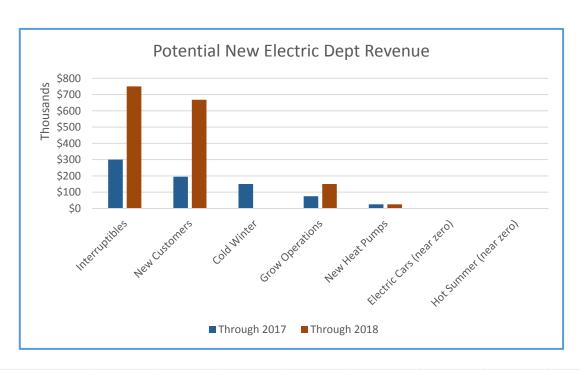
### **ELECTRIC DEPARTMENT – RATE COMPARISON**



COMPARABLE ALASKA ELECTRIC	RATES
Ketchikan	10.73
Juneau	11.94
Sitka	12.8
Sitka Proposed (5%)	14.03
Kodiak	14.55
Homer	16.9
Anchorage	17.7
Fairbanks	21.65



## **ELECTRIC DEPARTMENT** – New Revenue Opportunities



Potential				Through	Through
New Revenue \$				2017	2018
Interruptibles				300,000	750,000
New Customers				195,000	668,000
Cold Winter				150,000	0
Grow Operations				75,000	150,000
New Heat Pumps				25,000	25,000
Electric Cars (near zero)				1,250	1,250
Hot Summer (near zero)				0	0
				748,267	1,596,268



### **ELECTRIC DEPARTMENT – FY 17** RATES

#### **FY2017** Rate Increase - *Executive* **Summary**

- 5% Increase to all rates (Residential, Harbor, Commercial, Industrial)
- Eliminate Residential Tier from 0-200 kwhrs/mo (approx. 350 accts, 7\$/mo impact)
  - Was 0-200@8.58 cents, 200-800@11.45c, >1000@13.05c
  - Proposed 0-1000@12.03c, >1000@13.7c
- Increase monthly connection fees
  - 5% (Residential, Commercial, Industrial)
  - Harbors from \$8.75/mo to \$19.50/mo to pay for replacement of failed meters
- Raises typical family bill from \$128/mo to \$140/mo....\$144/yr (9%)
- Lowest users <200kwhrs/mo from \$37/mo to \$44.54/mo......\$90/yr (20%)
- Lowest Users account for <0.2% of total revenue

#### ELECTRIC ENTERPRISE FUND FY17

RATE CALCULATOR		
INPUTS YOU CAN CHANGE		
% Change in FY17 Load (-5% to 5%)	1%	%
% Change in FY17 Elect Rates	5.0%	0-20%
Months of Changed Rate in FY17	66%	
Funds from Mil Rate Tax or OTHER \$	500,000	\$
Funds from Rate Stabilization Acct	2,772,000	2,772,000
% Reduction in non-labor expense	2%	0-10%
CALCULATIONS and FIXED # Original Elect Rate \$/kwhr	0.1336	
Adjusted Elect Rate \$/kwhr	0.1403	see FY18
Original KWHrs Sold -	104,156,400	kwhrs
Adjusted KWHrs Sold -	105,197,964	kwhrs
Calculated Electric Revenue	14,518,245	\$
Other Revenue (fixed)	550,394	\$
Mill Rate Revenue	500,000	\$
Operations Costs Labor (fixed)	(4,200,000)	\$
Adjusted Operations Costs, Non Labor	(4,214,000)	\$
Interest and Principal on Debt (fixed)	(7,958,712)	\$
		1
REQUIRED TARGET IS 125%	125%	

FOR BOND COVENENT AND CAPITAL PLAN



# **ELECTRIC DEPARTMENT – FY 17** *RATES*

5% Rate Increase in FY17

# ELECTRIC ENTERPRISE FUND FY17 RATE CALCULATOR

INPUTS YOU CAN CHANGE		
% Change in FY17 Load (-5% to 5%)	0%	%
% Change in FY17 Elect Rates	5.0%	0-20%
Months of Changed Rate in FY17	66%	
Funds from Mil Rate Tax or OTHER \$	700,000	\$
Funds from Rate Stabilization Acct	2,772,000	2,772,000
% Reduction in non-labor expense	2%	0-10%

0.1336	
0.1403	see FY18
104,156,400	kwhrs
104,156,400	kwhrs
14,374,500	\$
550,394	\$
700,000	\$
(4,200,000)	\$
(4,214,000)	\$
(7,958,712)	\$
	0.1403 104,156,400 104,156,400 14,374,500 550,394 700,000 (4,200,000) (4,214,000)

REQUIRED TARGET IS 125%	125%
FOR BOND COVENENT AND CAPITAL PLAN	N

10 % Rate Increase in FY17

#### **ELECTRIC ENTERPRISE FUND FY17**

RATE CALCULATOR		
INPUTS YOU CAN CHANGE		
% Change in FY17 Load (-5% to 5%)	1%	%
% Change in FY17 Elect Rates	10.0%	0-20%
Months of Changed Rate in FY17	66%	
Funds from Mil Rate Tax or OTHER \$	50,000	\$
Funds from Rate Stabilization Acct	2,772,000	2,772,000
% Reduction in non-labor expense	2%	0-10%
CALCULATIONS and FIXED #		
Original Elect Rate \$/kwhr	0.1336	
Adjusted Elect Rate \$/kwhr	0.1470	see FY18
Original KWHrs Sold -	104,156,400	kwhrs
Adjusted KWHrs Sold -	105,197,964	kwhrs
Calculated Electric Revenue	14,982,042	\$
Other Revenue (fixed)	550,394	\$
Mill Rate Revenue	50,000	\$
Operations Costs Labor (fixed)	(4,200,000)	\$
Adjusted Operations Costs, Non Labor	(4,214,000)	\$
Interest and Principal on Debt (fixed)	(7,958,712)	\$
		1
REQUIRED TARGET IS 125%	125%	
FOR BOND COVENENT AND CAPITAL PLAI	V	



# **ELECTRIC DEPARTMENT – FY 18** *RATES*

With 5% Rate Increase in FY17

<b>ELECTRIC ENTERPRISE F</b>	UND FY18	3
RATE CALCULATOR		
INPUTS YOU CAN CHANGE		
% Change in FY18 Load (-5% to 5%)	1%	%
% Change in FY18 Elect Rates	14.5%	0-20%
Funds from Mil Rate Tax or OTHER \$	1,000,000	\$
Funds from Rate Stabilization Acct	229,000	229,000
% Reduction in non-labor expense	0%	0-10%
CALCULATIONS and FIXED #	0.4.400	
Original Elect Rate \$/kwhr	0.1403	
Adjusted Elect Rate \$/kwhr	0.1606	
Original KWHrs Sold -	104,156,400	kwhrs
Adjusted KWHrs Sold -	105,197,964	kwhrs
Calculated Electric Revenue	16,896,960	\$
Other Revenue (fixed)	550,394	\$
Mill Rate Revenue	1,000,000	\$
Operations Costs Labor (fixed)	(4,200,000)	\$
Adjusted Operations Costs, Non Labor	(4,500,000)	\$
Interest and Principal on Debt (fixed)	(7,958,712)	\$
		1
REQUIRED TARGET IS 125%	125%	

With 10% Rate Increase in FY17

ELECTRIC ENTERPRISE FUND FY18								
RATE CALCULATOR								
INPUTS YOU CAN CHANGE								
% Change in FY18 Load (-5% to 5%)	1%	%						
% Change in FY18 Elect Rates	9.0%	0-20%						
Funds from Mil Rate Tax or OTHER \$	1,000,000	\$						
Funds from Rate Stabilization Acct	229,000	229,000						
% Reduction in non-labor expense	0%	0-10%						
CALCULATIONS and FIXED #								
Original Elect Rate \$/kwhr	0.1470							
Adjusted Elect Rate \$/kwhr	0.1602							
Original KWHrs Sold -	104,156,400	kwhrs						
Adjusted KWHrs Sold -	105,197,964	kwhrs						
Calculated Electric Revenue	16,851,283	\$						
Other Revenue (fixed)	550,394	\$						
Mill Rate Revenue	1,000,000	\$						
Operations Costs Labor (fixed)	(4,200,000)	\$						
Adjusted Operations Costs, Non Labor	(4,500,000)	\$						
Interest and Principal on Debt (fixed)	(7,958,712)	\$						
		1						
REQUIRED TARGET IS 125%	125%							
FOR BOND COVENENT AND CAPITAL PLAN								



# **ELECTRIC DEPARTMENT – FY 18** *RATES*

#### With 5% Rate Increase in FY17 and NO Mil Rate Increase

ELECTRIC FAITERPRICE FUND EVA									
ELECTRIC ENTERPRISE F	ELECTRIC ENTERPRISE FUND FY18								
RATE CALCULATOR									
INPUTS YOU CAN CHANGE									
% Change in FY18 Load (-5% to 5%)	1%	%							
% Change in FY18 Elect Rates	21.0%	0-20%							
Funds from Mil Rate Tax or OTHER \$	0	\$							
Funds from Rate Stabilization Acct	229,000	229,000							
% Reduction in non-labor expense	0%	0-10%							
CALCULATIONS and FIXED #									
Original Elect Rate \$/kwhr	0.1403								
Adjusted Elect Rate \$/kwhr	0.1697								
Original KWHrs Sold -	104,156,400	kwhrs							
Adjusted KWHrs Sold -	105,197,964	kwhrs							
Calculated Electric Revenue	17,856,176	\$							
Other Revenue (fixed)	550,394	\$							
Mill Rate Revenue	0	\$							
Operations Costs Labor (fixed)	(4,200,000)	\$							
Adjusted Operations Costs, Non Labor	(4,500,000)	\$							
Interest and Principal on Debt (fixed)	(7,958,712)	\$							
		4							
REQUIRED TARGET IS 125%	125%								
FOR BOND COVENENT AND CAPITAL PLAN		7							



# **ELECTRIC DEPARTMENT** – RATES

# **Executive Summary of Rate Challenges**

- FY17 Base Plan
  - FY17 Rate @ 5%
  - 125% Bond Covenant Issues
  - Rate Stabilization Fund
  - Other Funding Required
  - Fund 10 Year Capital Plan
- FY17 Alternatives
  - Tier 1, Tier 2, Tier 3
  - 10% Rate Increase versus 5%
  - Eliminate 10 Year Plan
- **FY18** Base Plan
  - 14.5% Rate Increase
  - \$1.0 M from Mil Rate Increase
  - \$229,000 from Rate Stabilization
- **FY18** Alternatives
  - No \$1.0M from Mil Rate means 21% Rate Increase
- RISKS Total annual khwrs continues to trend down, not up
- **REVENUE OPPORTUNITIES ARE CRITICAL** \$1.6M or 10% of Total Revenue



### **ELECTRIC DEPARTMENT** – 10 Year Plan

### **Consolidated Ten Year Plan**

#### Key Factors

- \$22 M total over 10 years with reserves based on Industry Standards
- Initial total capital of \$15M
- Working capital increases by \$1.5M/yr by bond covenant
- Maintains \$2.5M Emergency Reserve
- Maintains \$1.0M Liquidity Reserve
- Based on an 8 month process with detailed engineering
- Includes termination of some projects and re-adjustment of existing projects
- \$1M Warehouse eliminated, Trailer and Cargo Vans substituted

#### Key Projects

- N-1, \$3.9M (Redundancy for Marine Street and 80% of customers)
- Green Lake Power Plant Overhaul, \$4.8M (last overhaul early 90's)
- Jarvis Fuel System Repairs, \$1.5M
- Thimbleberry Bypass, \$3.8M
- Feeder Improvements, \$1.6M
- Blue Lake Completion, \$2.5M
- Capital for Fuel Conversions, \$1.2M
- Harbor Meters, \$75,000



# **ELECTRIC DEPARTMENT** – 10 Year Plan

		Required	Status	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	TOTAL
63010	Green Lake FERC Compliance: Inspect and Upgrades	141,291	OPEN	105,000	36,291								141,291
90562	Green Lake Power Plant Improvements	334,697	OPEN	50,000	50,000	50,000	50,000	50,000	50,000	34,697			334,697
90594	Blue Lake Third Turbine and Dam Upgrade	2,477,001	OPEN	500,000	560,000	340,000	760,000	250,000	67,001				2,477,001
90610	Blue Lake FERC License Mitigation	423,734	OPEN	220,000	93,790	109,944							423,734
90614	Takatz Lake Hydroelectric (open pending Grant Aug FY17)	(0)	OPEN										0
90646	Jarvis Street Diesel Capacity Increase	(21,361)	CLOSE	(21,361)									(21,361)
90717	Jarvis Street Improvements	27,781	OPEN	27,781									27,781
90794	Jarvis Bulk Tank Improvements	0	OPEN										0
90804	Blue Lake Powerhouse Conversion	150,000	OPEN									150,000	150,000
-New -	Blue Lake Howell Bunger Valve	0	NEW										0
-New -	Green Lake Power Plant 35yr Overhaul	4,900,000	NEW		0	4,900,000	0	0					4,900,000
-New -	Green Lake Power Plant pre overhaul inspection	380,000	NEW		380,000								380,000
- New -	Jarvis Fuel System Repairs and Storage Tanks	1,500,000	NEW		200,000	700,000	500,000	100,000					1,500,000
-New -	Blue Lake Auto start Back-up Diesel	70,000	NEW			70,000							70,000
-New -	Green Lake Auto start Back-up Diesel	20,000	NEW				20,000						20,000
-New -	Green Lake Re-roof	225,000	NEW						225,000				225,000
80003	Feeder Improvements	1,600,000	OPEN	200,000	200,000	200,000	200,000	200,000	200,000	200,000	100,000	100,000	1,600,000
90261	Island Improvements	225,000	OPEN	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	225,000
90512	SMC Road Upgrades Express Feeder	0	CLOSE										0
90627	Marine Street Substation Voltage Regulator	0	CLOSE										0
90645	HPR - Kramer - Cascade Creek Line Riser	0	CLOSE										0
90648	Transmission & 1220 Upgrade	0	CLOSE										0
90672	Medevejie Hatchery Transformer Replacement	45,000	OPEN	45,000									45,000
90718	Marine Street Substation Replacements	160,000	OPEN	20,000	20,000	20,000	20,000	20,000	20,000	20,000	10,000	10,000	160,000
90765	Jarvis St. Control Building Roof Replacement	0	CLOSE										0
-New -	Marine St N-1Design to New HPR North Sub	3,900,000	NEW	1,400,000	1,500,000	0							2,900,000
-New -	69 kV Thimbleberry Trans Line Bypass	3,800,000	NEW		20,000	20,000	60,000	300,000	1,000,000	1,400,000	1,000,000		3,800,000
80040	Automated Meter Reading	32,085	OPEN	32,085									32,085
90410	SCADA System Enhancements	230,000	OPEN	110,000	120,000								230,000
90611	Microwave or Fiber Optic	0	CLOSE										0
90628	Demand Side Load Management-(close 6/30/15)	14,437	OPEN	14,437									14,437
90777	Meter Replacement Upgrading Meters	95,000	OPEN	45,000	50,000								95,000
90791	Dual Fuel Interruptible Power	0	CLOSE										0
90719	Jarvis Warehouse Paving	0	CLOSE										0
90776	Jarvis Electric Storage & Shop Building	85,000	OPEN	85,000									85,000
-New -	Capital for Fuel Conversions (Interruptibles)	1,200,000	NEW	600,000	600,000								1,200,000
-New -	Asset Management	12,800	NEW	12,800									12,800
-New -"	Safety - Arc Flash, Training, Equipment and implementation s	50,000	NEW	20,000	10,000	10,000	10,000						50,000
New -"	Harbor Meters	75,000	NEW	75,000									75,000
	TOTAL	22,152,464		3,565,742	3,865,081	6,444,944	1.645,000	945,000	1,587,001	1,679,697	1,135,000	285,000	21,152,464