

Aturidat Ilektresedat Guahan

Reliability • Accountability • Transparency • Efficiency • Report

Fiscal Year 2017

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### **GPA MISSION**

"GPA Shall Provide

R eliable

E<sup>3</sup> fficient, Effective, Environmentally Sound

A2 ffordable, Accountable

L eading Energy Solutions."

#### **GPA VISION**

GPA will be the best utility providing outstanding energy solutions to our island community.

Mr. John J.E. Kim, CPA Chief Financial Officer



### **About Us**

The Guam Power Authority (GPA) was created in 1968 as a public corporation and autonomous instrumentality of the Government of Guam. GPA is governed by the Consolidated Commission of Utilities (CCU) comprised of five elected members. GPA is also subject to the regulation of the Guam Public Utilities Commission (GPUC), and has adopted the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC). The Authority has total assets of \$955M and a workforce of 467 employees. Guam Power Authority has 420 megawatts of installed generation capacity, owns 1,827 miles of transmission and distribution lines and operates and maintains 29 substations, a 26.5 megawatt solar farm and 275KW wind turbine. Steadfastly committed to energy production and fuel diversification, GPA continues to work towards its goal of 50 percent energy from cost-effective renewable sources by 2028, and bringing natural gas to Guam.

### **Demographics**

As of September 30, 2017, GPA serves 50,843 customers comprised of residential, commercial, Government of Guam, and GPA's largest customer, the U.S. Navy. GPA has established six strategic measures including superior customer service. The Authority has installed smart meters and online tools to help customers understand and manage their energy use, including the online website "My Energy Guam," which provides residential customers these capabilities; and the online "Bizconnect" tool serving non-residential customers.

## Our Rate(s)

Committed to providing affordable and reliable power to the people of Guam, GPA maintains the lowest rates compared to other neighboring Pacific islands as shown in the table below. GPA's system average rate of 20.56 cents per kWh in 2017, was just slightly higher than the 2016 rate of 19.7 cents per kWh.

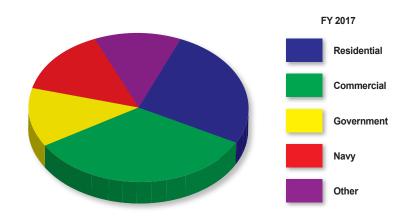
Customers	2015	2016	2017	GPA Systems Average Rate Pacific Region Rate Compo	Pacific Region Rate Comparison		
Residential	42,888	43,252	43,756	50 Soipon 18.7 40 Guan 18.1			
Commercial	5,695	5,720	5,758	30 <u>27.95</u> <u>27.98</u> Virgin ls <u>29</u> 23.33 19.67 20.56 Oolhu	9.8 33.1 37.3		
Government	1,097	1,235	1,328	20 18.86 1777 13.26 9.47 10.43 Howaii 10 9.09 10.21 10.07 10.20 10.23 Moui 24.9 Molokai 27.2	35.5		
Navy	1	1	1	2013 2014 2015 2016 2017 Lanai 25.0  Base Rate LEAC Total Cents per KWH	40		
Total	49,681	50,208	50,843				

# OUR PROGRESS

KEY STRATEGIES	2015	2016	2017
PRODUCT AFFORDABILITY	Dededo Indoor substation. 26.5 MW Dandan Solar Farm. 275 KW wind turbine in Santa Rita.	Levelized Energy Adjustment Clause reduced by 17.4%. Line losses further dropped to 4.55% as well as Station use dropped to 3.77%. A 1% reduction in line losses means a \$1.5M fuel cost savings to our customers.	Station power dropped by 0.03% from 3.77% to 3.74%. Reduction in station power results in fuel savings.  Line losses remained at 4.55%. Reduction in line losses results in lower fuel expenses.  The CCU Board and GPA Management remain committed to reducing operating costs by maintaining levels of FTEs and reducing overtime expenditures.
SUPERIOR CUSTOMER SERVICE	Launched Demand-Side Manage- ment Program providing customer rebates to reduce the cost for approved energy efficient appliances.	Paid out over \$150,000 customer rebates since 2015.  Redesigned GPA energy statement to provide customers useful information using easy to understand graphics and energy management tips.	GPA paid out \$560,000 in Energy Sense Rebates to customers for purchasing approved energy efficient appliances.  GPA launched additional payment options for customers including Pay-By-Phone, Online payments, Mobile APP payments and ACH payments.
HIGH SYSTEM RELIABILITY	Completed the following:  1. Dededo Indoor substation.  2. Upgraded Geographic Information System.	CCU and PUC approved procuring up to 180MW of reliable, very efficient, flexible generation.  GPA signed a Rent-To-Own agreement with Aggreko for 40MW to shore up GPA generation.  Replaced Cabras 1 Power Transformer.	Dededo Combustion Turbine Units 1&2 returned to service, contributing 40 megawatts of standby generating capacity.  Completed Cabras Unit 2 annual turbine and boiler overhaul maintenance work.  Completed major refurbishment of Cabras (T300), Piti (T700), Tamuning (T51), and Macheche (T90) power transformers.
FINANCIALLY SOUND AND STABLE	80 days unrestricted cash.  Debt service coverage of 2.62x.  Credit Rating improving: Standard & Poor-BBB. Moody's- upgrade to Baa2. Fitch—BBB.	207 days unrestricted cash.  Debt service coverage of 3.38x.  GPA maintained its current ratings in spite of the Cabras 3&4 incident: S&P-BBB/Stable Moody's-Baa2/Stable Fitch-BBB/Stable  Working with Insurers to settle claim per policy limits.	71 days unrestricted cash.  Debt service coverage of 2.65x.  GPA maintained its current ratings:     S&P-BBB/Stable     Moody's-Baa2/Negative     Fitch-BBB-/Stable
COMMITMENT TO WORKFORCE DEVELOPMENT	Quarterly employee and MagPro recognition awards. Service awards for employees. Training and continuing education to all employees.	Quarterly employee and annual MagPro recognition awards. Service awards for employees. Training and continuing education to all employees.	Fifteen (15) apprentices completed GPA's 4th Cycle Graduate Apprentice Program. Provided training and continuing education benefits to all employees.
OPTIMIZE THE USE OF TECHNOLOGY	Smart Grid Command Center section established to use smart grid tools to better manage over 50,000 smart meters and identify customer outages almost instantaneously.	Revamped Online Payment System - customers can change their contact information, view financial history for the past 12 months. iDashboards—analytics to monitor our achievements in providing superior customer service. Advanced Grid Analytics (AGA) - monitor and solve power quality and reliability issues.	Launched new Android and iOS Mobile Payment APP.  Upgraded MYENERGYGUAM.COM.  On-going and continuous review of all security processes and network systems to ensure customer data security.

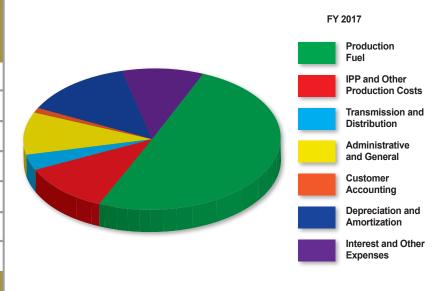
## OUR FINANCES

REVENUES						
Type (in \$000)	2013	2014	2015	2016	2017	% Change from 2016
Residential	125,932	125,023	105,533	92,057	100,602	9%
Commercial	174,126	171,805	145,356	120,186	126,806	6%
Government	64,072	62,311	53,710	45,460	48,761	7%
Navy	84,899	75,323	61,586	49,193	54,905	12%
Other	17,881	9,317	14,691	8,900	47,794	437%
Total	466,910	443,779	380,876	315,796	378,868	20%



GPA's revenue increased by 20% from the prior year. The increase is due to the increase in peak demand of electricity and customer consumption, and to the increase in the global fuel price. Decline of sales in the prior year is due to conservation efforts of the customers, efficiencies in household appliances and also to the growing number of net metering customers. Increase in other income and extraordinary revenues was due to the Cabras 3&4 explosion insurance recovery.

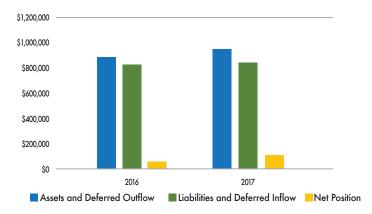
EXPENSES						
Type (in 000)	2013	2014	2015	2016	2017	% Change from 2016
Production Fuel	295,473	271,175	204,136	146,340	166,426	14%
IPP and Other Production Costs	42,273	39,937	38,483	32,635	37,697	16%
Transmission and Distribution	13,368	12,950	11,170	10,817	11,750	9%
Administrative and General	31,589	28,394	21,908	31,686	32,484	3%
Customer Accounting	5,101	3,999	4,739	5,492	4,095	-25%
Depreciation and Amortization	31,156	36,989	41,765	44,240	44,292	0%
Interest and Other Expenses	43,069	43,756	43,484	54,261	33,770	-38%
Total	462,029	437,200	365,685	325,471	330,514	2%



GPA's expenses slightly increased from Fiscal Year 2016. The increase of Production fuel is due to the increase in the global fuel prices. The increase in the IPP and other production cost is due to the new capital lease agreement with Aggreko which started on January 2017.

NET POSITION							
(In \$000)	2016	2017	% Change from 2016				
Assets and Deferred Outflow	888,435	955,488	8%				
Liabilities and Deferred Inflow	826,612	845,311	2%				
Net Position	61,823	110,177	78%				

Assets are the economic resource(s) which GPA controls. Deferred outflow is the consumption of the assets of the company to be reported in the future period. Liabilities and Deferred inflow are the acquisition of the assets of the company that should be recorded in the future period. Net position is the residual of the two elements.



# OUR FUTURE CHALLENGES



### **GUAM POWER AUTHORITY**

ATURIDÅT ILEKTRESEDÅT GUAHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

## GPA continues to make considerable progress on its Clean Power Initiative.

Clean Power Means Cleaner Air Non-compliance with USEPA's RICE MACT and EGU MACT affects over 200 MW of capacity. Our compliance plan transitions generation from residual fuel oil-burning generation to dual-fuel capabilities using clean fuels including ultralow sulfur diesel (ULSD) and natural gas while installing clean, low-cost utility-scale renewable energy. The combination of renewable energy, cleaner fuel, and more efficient, flexible generation dramatically improves air quality along the southwest to northwestern coast of Guam and keeps power affordable. Installing new flexible generation enables integration of more low-cost, utility-scale renewable energy allowing GPA to reduce and stabilize LEAC rates.

Clean Power Means Good Power Always and Power When You Want it

Clean power means reliable, resilient power that is safe for customers and their equipment. The island wide power system is monitored and controlled to eliminate voltage sags, swells, or surges and ensure system reliability. Faulty equipment and system issues are identified, fixed, or replaced before they cause customer outages or power quality problems. Customer outages are located and responded to before the customer calls. Ongoing activities include accelerated vegetation management and an Infrared Analysis Program, Advanced Grid Analytics Program, and Predictive T&D Maintenance Program.

Clean Power Means Affordable Power

Fuel diversification using ULSD, natural gas, and renewable energy sources reduces and stabilizes fuel costs (LEAC). Demand-side Management (DSM) programs help manage load growth reducing expansion of generation, transmission & distribution (T&D) systems and need for additional staff. DSM has paid out over \$1.5 million energy sense rebates since December 2015. While expanding its rebate program, GPA is working with UOG, GDOE, the Navy, and other large customers to help them become more efficient. GPA champions electric vehicles (EVs). Industry forecasts indicate by the mid 20's, EVs will cost less than gas ones. Energy sales growth for EV charging will allow GPA to lower its base rate. GPA has been rightsizing its workforce; from 524 at the start of FY 2014 to 463 FTEs today. GPA will continue to right-size as the Cabras 1, 2, 3, & 4 units are retired and invest in productivity enhancing technologies such as smart grid. GPA has reduced overtime from \$3.7M annually to \$1.4M. GPA's bond refinancing reduces debt service by \$500,000/year. GPA actively seeks ways to cut costs including leveraging information and intelligent business systems to modernize aging bulk power infrastructure and achieve operational excellence. GPA continues to improve its creditworthiness and maintain its investment grade status ensuring access to inexpensive capital. GPA's competitive advantage is its transmission and distribution system. GPA plans and executes least-cost plan for upgrading and replacing legacy equipment and improving infrastructure.

Clean Power Means Enhancing Customer Engagement

Customers expect higher levels of electric service quality and engagement. GPA is finding better ways to engage, inform, communicate, and satisfy customers. As customers now increasingly engage by using technology and social media, GPA is making every effort to exceed customer expectations.

JOHN M BENAVENTE, P.E.



Mobile workforce Management System (in progress)

**Outage Management** System (in progress)



**🧠**) 2018

Achieve American **Public Power** Association designation as a Reliable Power Provider



Commission a 40MW/22MW battery Energy Storage System (BESS) at Talofofo and Agana (online in late 2018)

**Execute Renewable** Integration/Long Range Transmission Plan (2018 to 2023)



2019

Establish a complex Supervisory Control and Data Acquisition (SCADA) system and Automation Generation Control



**@) 2021** 

Addition of new 180MW base load power plant (late 2021)

Convert RFO Fuel Storage & Pipelines to Ultra Low Sulfur Diesel Fuel (ULSD)



Convert Piti 8 & 9 to **Dual-Fuel Operation** (2021-22)



**@** 2022

Integrate 160 MW Utility Scale Solar with Renewable Integration (RI-ESS) and Energy-Shifting **FSS** 

Initiate LNG Infrastructure and Supply

**Retire Cabras Units** 1, 2, 3, & 4



2025

Establish 50% GPA Energy Production from Renewable Sources (2025 - 2030)





www.guampowerauthority.com

We want to hear from you. Please contact GPA and let us know what information we can provide to you in our future reports: John J.E. Kim, GPA Chief Financial Officer (671) 648-3119/648-3066 or via email at jkim@gpagwa.com