Guam Power Authority is a public corporation and a component unit of the Government of Guam established in 1968. It is governed by the Consolidated Commission on Utilities (CCU), an elected five member board. GPA is 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 $904M and employs approximately 466 employees. The Authority has 429 megawatt (MW) of generation capacity, 663 miles of transmission and distribution lines and 29 substations. In FY 2016, GPA’s power purchase agreement to purchase solar energy produced by NRG Solar Dandan LLC’s 25.65MW solar plant was fully implemented and a 275kW wind turbine pilot project became operational in early 2016. We continue to commit ourselves to green energy solutions.

As of September 30, 2016 GPA had 50,208 customers. They are categorized as residential, commercial, Government of Guam and the U.S. Navy, which is GPA’s largest customer. GPA has established six strategic measures and one of them is providing superior customer service. Our efforts to achieve this include installation of smart meters which give control to our customers over their economical energy use. To assist the customers in monitoring their energy use we created an online site called www.MyEnergyGuam.com.

GPA is committed to provide affordable and reliable power to the people of Guam. As shown on the graph below, our rate is still one of the lowest compared to other island utilities.

### GPA MISSION
“GPA Shall Provide
R eliable
E fficient, Effective, Environmentally Sound
A 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

Fiscal Year 2017
# Our Progress

## Key Strategies

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Levelized Energy Adjustment Clause changed by at least 41%.</td>
<td>Dedede Indoor substation.</td>
<td>Levelized Energy Adjustment Clause reduced by 17.4%.</td>
<td>Line losses further dropped to 4.55% as well as Station use dropped to 3.77%.</td>
</tr>
<tr>
<td>Line losses dropped to 4.91%.</td>
<td>Cabras 3&amp;4 smoke stack.</td>
<td>A 1% reduction in line losses means a $1.5M fuel cost savings to our rate-payers.</td>
<td></td>
</tr>
<tr>
<td>Station use dropped to 4.98%.</td>
<td>Completion of DanDan Solar Farm for additional 25 MW.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Completion of wind turbine in Santa Rita for additional .275 MW.</td>
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</tr>
</tbody>
</table>

## Superior Customer Service

- Construction of Gloria B. Nelson Service Building providing centralized services.
- Convenient payment methods.
- Implemented the Data Side Management Program which will provide rebate incentives to customers for buying approved energy efficient appliances.
- Rebate incentives to customers for buying approved energy efficient appliances still on going.
- A redesigned energy statement is provided to customers for a more useful information complete with graphics and tips on how to manage their energy usage.

## High System Reliability

- Completed the following:
  1. P003 underground extension to Port Authority.
  2. Agat village pole hardening and hybrid conversion.
  3. Upgrade of Hagatna and Tumon substation.
- Completed the following:
  1. Dedede Indoor substation.
  2. Cabras 3&4 smoke stack.
- CCU and PUC approved the procurement of up to 180MW of generation capacity which will provide efficient, reliable and least cost generation.
- In January 2016, 40MW of temporary power came online to supplement the reduced generation capacity caused by the 2015 incident at the Cabras 3&4 power plants. At the end of the one-year contract, GPA and Aggreko entered into a Rent-to-Own agreement to purchase the generators.
- Replacement of Cabras1 Power Transformer.
- 62 days unrestricted cash.
- Debt service coverage of 1.91x.
- Maintained investment grade rating.
- Moody’s upgrade from Ba to Baa3.
- 80 days unrestricted cash.
- Debt service coverage of 2.62x.
- Ratings: 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.

## Financially Sound and Stable

- Quarterly employee recognition awards.
- Service awards for employees.
- Training and continuing education to all employees.
- Quarterly employee and MagPro recognition awards.
- Service awards for employees.
- Training and continuing education to all employees.
- 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 issue.

## Commitment to Workforce Development

- Implemented the new Customer Care and Billing software-provides real time information to customers.
- Installation of smart meters-100% completed.
- Installation of outage management system.
- Implemented the Geographic Information System to monitor island wide overhead lines and power poles. This will ensure immediate response should there be an emergency situation.

## Optimize the Use of Technology

- 2014 2015 2016
- **PRODUCT**
- **AFFORDABILITY**
- **SUPERIOR**
- **CUSTOMER**
- **SERVICE**
- **HIGH SYSTEM**
- **RELIABILITY**
- **FINANCIALLY**
- **SOUND AND**
- **STABLE**
- **COMMITMENT**
- **TO WORKFORCE**
- **DEVELOPMENT**
- **OPTIMIZE**
- **THE USE OF**
- **TECHNOLOGY**
GPA's operating revenue dropped by almost 17% from prior year. This is primarily due to the reduction of the Levelized Energy Adjustment Clause (LEAC). The reduction in LEAC was due to the worldwide decrease in fuel prices and GPA's effort to secure better fuel rates.

GPA's expenses also decreased in 2016 as compared to 2015. Most of the reduction is attributed to the production fuel cost. GPA also incurred an extraordinary loss of almost $20M due to the generator explosion and fire at Cabras 3 and 4, pending final settlement with the insurance company.

The primary source of funds were receipts from customers. In 2016, GPA received $50M cash advance from the insurance claims on the Cabras 3&4 fire and generator explosion.

The biggest portion of the disbursement went to payments made to vendors and suppliers. This account for almost 55% of the total payments made for the year. Included in this payment are fuel purchases in the amount of $114M. Debt service payments include bond and capital lease payments. Payments to employees include labor and benefits for services rendered. GPA has investments which are administered by trustees in accordance with trust agreements and bond indentures. Additions to utility plant include refurbishment of Cabras 2 generation plant, digital control system of Cabras 1 & 2, construction of the Dededo indoor substation and wind turbine.

All financial activities of GPA are in line with the Mission, Vision and Goals established by the Authority. GPA's financial statements for fiscal year 2016 received a clean opinion from the auditors of Deloitte & Touche. A comprehensive financial statement of GPA may be viewed online at www.guampowerauthority.com

### HOW DID WE USE OUR FUNDS?

<table>
<thead>
<tr>
<th>Type</th>
<th>2012 (in $000)</th>
<th>2013 (in $000)</th>
<th>2014 (in $000)</th>
<th>2015 (in $000)</th>
<th>2016 (in $000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers</td>
<td>198,803</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Debt Service</td>
<td>60,206</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>35,329</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Investments</td>
<td>27,254</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Additions to Utility Plant</td>
<td>24,989</td>
<td></td>
<td></td>
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<tr>
<td>Bond Fund Investments</td>
<td>11,084</td>
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<tr>
<td>Retiree Benefits</td>
<td>4,147</td>
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<tr>
<td>Self Insurance - Disbursements</td>
<td>207</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest - Guarantee Deposit</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>542,700</td>
<td>462,029</td>
<td>437,200</td>
<td>365,685</td>
<td>322,843</td>
</tr>
</tbody>
</table>

### SOURCES OF FUNDS

<table>
<thead>
<tr>
<th>Type</th>
<th>2012 (in $000)</th>
<th>2013 (in $000)</th>
<th>2014 (in $000)</th>
<th>2015 (in $000)</th>
<th>2016 (in $000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts From Customers</td>
<td>305,167</td>
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<tr>
<td>Proceeds From Insurance Claims</td>
<td>50,000</td>
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<tr>
<td>Proceeds From Typhoon Assistance</td>
<td>2,947</td>
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<tr>
<td>Receipts from US Government</td>
<td>1,763</td>
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<td></td>
<td></td>
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<tr>
<td>Interest on Investments / Bank Accounts</td>
<td>517</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>360,394</td>
<td>443,779</td>
<td>466,910</td>
<td>454,999</td>
<td>437,200</td>
</tr>
</tbody>
</table>
GPA continues to face major challenges:
1) USEPA compliance
2) 180 MW dual-fired flexible generation by 2021
3) Integrating non-firm renewable energy sources
4) Incentivizing energy efficiency (DSM)
5) Increasing the penetration of all-electric vehicles
6) Transformation and modernization
7) Building additional smart grid capabilities
8) Maintaining GPA competitive advantage
9) Service affordability and right sizing
10) Achieving operational excellence
11) Maintaining investment grade rating
12) Satisfying customers

USEPA has implemented new regulations affecting several GPA Generation Units. GPA has submitted a compliance plan to USEPA wherein GPA transitions from residual fuel oil-burning generation to dual-fuel generations beginning with ultralow sulfur diesel (ULSD) and adding natural gas. When fuel oil prices rise significantly, GPA will invest in a natural gas infrastructure to lower costs.

GPA has provided a compliance timeline including:
- Tanguisson Power Plant retirement
- Establishing LNG infrastructure
- 180 MW of new baseload generation by 2021
- Integrating over 120 MW renewable energy systems
- Generation Retrofits for dual-fired operation
- Retiring Cabras 1&2 and potentially Cabras 3

The Guam PUC has approved the hire of an EPCM consultant to assist GPA to develop a bid for 180 MW of New Generation. GPA has initiated procurement of land for the new power plant. GPA expects an August 24, 2017 release of the new power plant multistep bid.

Since 2014, net metering (NEM) cumulative capacity has doubled each year to about 16 MW. GPA is moving forward with Phase II and Renewable Energy Acquisition projects. GPA has awarded 40 MW of Battery Energy Storage Systems capable of contingency/spinning reserve or frequency regulation control modes improving grid stability. GPA has kicked off a Renewable Integration Study with the United States Navy to support integrating more renewable energy and improve grid stability/power quality. GPA must ameliorate existing inherent weaknesses of its grid.

GPA has launched three DSM residential programs. The PUC has reviewed GPA’s recommendation for 18 new commercial, industrial, and residential programs. PUC has requested that GPA prioritize five new programs for immediate roll-out including an Energy Audit Program for residential, commercial, and industrial customers. Additionally, GPA purchased two Nissan Leaf electric vehicles with Level II Chargers. GPA seeks participation of other Guam automobile dealerships to provide EV’s and Chargers citing GPA’s commitment to change out its light-duty vehicle fleet with electric vehicles.

GPA must leverage information and intelligent business systems to modernize aging bulk power infrastructure and achieve operational excellence. In FY 2017, GPA initiated the following projects: Grid Analytics, Mobile Workforce Management, SCADA, Fiber and Wireless Communication Network Expansion, and Performance Management Dashboards.

GPA’s competitive advantage is its power system infrastructure. GPA must maintain control over its distribution and transmission system. GPA must plan and execute improvements to this infrastructure as well as adopt a least-cost plan for upgrading and replacing legacy equipment. Additionally, GPA is right sizing its operations to improve operational excellence and affordability. Excellent opportunities for rightsizing exist.

- Leveraging intelligent business systems such as smart grid
- Converging operations and information technology
- Increasing automation and embedded intelligence within power equipment and control systems
- Consolidating common systems and functions with GWA
- Creating new uses for electric energy
- Replacing aging assets with more efficient, less resource intensive options

GPA must maintain access to capital markets to meet the challenges described above.

Customers expect higher levels of electric service quality and engagement. GPA must find better ways to engage, inform, communicate, and please customers. Customers now increasingly engage with service organizations by using technology and social media. The CCU has tasked GPA with exceeding customers’ expectations. We will deliver.

We want to hear from you. Do you like this report? Do you believe it should include any other information? Please let us know by contacting Lenora M. Sanz, Comptroller via email at lsanz@gpagwa.com.

JOHN M BENAVENTE, P.E.
General Manager (GPA)

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