Regular Board Meeting  
CCU Conference Room, Gloria B. Nelson Public Service Building  
5:30 p.m., June 5, 2019

MINUTES

1. CALL TO ORDER
The Chairman called the CCU regular monthly meeting of the Consolidated Commission on Utilities for June 6, 2019 to order at 5:42 p.m. He said four (4) Commissioners were present and that Comm. Santos was running late. Others in attendance include:

Commissioners:
Joseph T. Duenas            CCU Chairman
Francis E. Santos           CCU Vice Chairman
Michael T. Limtiaco         CCU Secretary
Judith P. Guthertz          CCU Treasurer
Simon A. Sanchez            Commissioner

Executive Mgmt.:
Miguel Bordallo              GM / GWA
John Benavente                GM / GPA
Melinda Mafnas               AGMO / GPA
John Cruz                    AGMET / GPA
Tricee Limtiaco              AGMA / GPA
Chris Budasi                 AGMA / GWA
John Kim                     CFO / GPA
Gilda Mafnas                 CFO (A) / GWA
Kelly Clark                  Legal Counsel / GWA
Graham Botha                 Legal Counsel / GPA

Management & Staff:
Art Perez                    Communication / GPA
Vangie Lujan                 Compliance & Safety / GWA
Yvonne Cruz                  Budget Officer / GWA
Heidi Ballendorf             Communications / GWA
Ron Topasna                  O&M Mgr, Water Treatment / GWA
Ann Borja-Gallarde           Mgmt. Analyst / GWA Ex.Office
Lou Sablan                   Board Secretary / CCU

Guest:
Kurt Bilz                    Brown & Caldwell
Jerry Johnson                Brown & Caldwell
Angela Perez                 AM Insurance
2. **APPROVAL OF MINUTES**
The Minutes of the CCU Special Meeting of April 4, 2019 was presented for approval.

Comm. Guthertz motioned to approve the Minutes subject to verification and written correction second by Comm. Sanchez.

It was clarified that Comm. Guthertz was present at the onset of the meeting; but asked to be excused because she was not feeling well. Her name was not listed in the attendance and Comm. Limtiaco asked that the Minutes be corrected and to add Comm. Guthertz name to the attendee list.

There was no further discussion or objection and the motion passed 4 ayes and 1 absent.

3. **COMMUNICATIONS**
   3.1 **Public Comments - None**

4. **GPA**
   4.1 **New Business**
   4.1.1 **GM Report**


---

1. **Generation System**:
The following summarizes the generation forecast for July 2019:

   - Projected Available Capacity: 373 MW
   - Projected Demand: 250 MW
   - Anticipated Reserve Margin: 123 MW

   - The peak demand for May 2019 was 254MW which is an increase from 251MW in May 2018. May was a high demand period mainly due to higher average temperatures.

---

[Graph showing Monthly Peak Demand with Projected Demand and 12 Month Moving Average]
2. **Net Metering (NEM) Credit Adjustment:**

The PUC ordered at its May 30th meeting to not make any change to the current program. It also ordered for GPA and PUC to agree on an independent consultant to determine the cost and benefits of NEM on GPA and the benefits distributed generation may have in the distribution system. The PUC will entertain the report when completed and will address the matter further at that time or once the total NEM KW capacity reaches about 26MW. The following graphs show Net Metering ending May 2019:

![Graphs showing NEM KW and NEM Count](image)

**NEM Installed Monthly**

![Graph showing NEM Installed Monthly](image)

3. **LED Streetlights:**

We are receiving delivery of 3,750 LED (white color) streetlights and will be replacing the vintage High Pressure Sodium (yellowish color) lights between now and September. The 250Watt lights will be installed on marine drive from and the 150 watts in villages in the south. We are in the process of ordering another 7,000 LED lights for delivery in FY 2020 to change out the balance of the HPS lighting.

The changeout of 3,750 lights will result in a savings to DPW of about $300K/year. This savings can install about another 1,000 lights. I will discuss with the DPW director the possibility of adding to the system to begin addressing poorly lighted areas impacting public safety.

4. **New 180 MW Power Plant:**

Three bidders submitted bids on June 3, 2019. The evaluation team began work today evaluating submittals to determine the lowest bidder. I may be able to advise the CCU on the final results in July.

5. **Utility Progress:**

The following provides a report on progress between 2015 to 2018 and issues to be address in 2019 and forward.

**[The Chairman announced that Comm. Santos joined meeting]**
SUMMARY

STRATEGY & PLANNING

GPA's actions are guided by its Strategic Plan & the Integrated Resource Plan (IRP). The Strategic Plan, developed in 2009, identified four areas of effective planning and policy development: high reliability, financial strength, employee effectiveness, and safe and reliable operations. The IRP was developed to provide the lowest cost solution for providing reliable, affordable power, diversifying power supply resources and fuels to mitigate risk, and exercising environmentally responsible stewardship of the economic and natural resources of the island. The IRP was last updated in 2016.

The 2015 event rendering Cabras units 3 & 4 inoperable significantly influenced specific IRP strategies and recommendations. Industry technologies, market responses to request for proposals and other factors shaped GPA's approach to recommendations. Projects and efforts supporting both plans are highlighted in this report. The focus of all efforts is to continuously improve overall customer service to our ratepayers while maximizing cost-savings. A summary of significant savings achieved within this period is included in this report.

The strength of GPA is evident in the significant progress toward the goal to provide reliable, affordable service to the island.

STRATEGIC PLAN SUMMARY

<table>
<thead>
<tr>
<th>CRITICAL SUCCESS FACTOR</th>
<th>STATUS</th>
<th>TREND</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHIEVE EXCELLENT CUSTOMER SERVICE CSF1</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>Sustained Improvements of Customer Satisfaction KPI 1</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>Improve Customer Experience KPI 2</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>PROVIDE AFFORDABLE &amp; VALUE PRODUCTS CSF2</td>
<td>▲</td>
<td></td>
</tr>
<tr>
<td>Minimize Energy Production Cost KPI 1</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>Reduce Line &amp; Unaccounted for Energy Losses KPI 2</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>Achieve Energy Diversity at Affordable Cost KPI 3</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>Improve Credit Rating KPI 4</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>DEVELOP SUSTAINABLE WORKFORCE &amp; LEADERSHIP CSF3</td>
<td>▲</td>
<td></td>
</tr>
<tr>
<td>Implement a Succession Planning Program KPI 1</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>Implement a Structured Leadership &amp; Workforce Training KPI 2</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>Achieve Safety Awareness &amp; Enhanced Safety Practices KPI 3</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>Enhance Employee Satisfaction KPI 4</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>ACHIEVE HIGH SYSTEM RELIABILITY CSF4</td>
<td>▲</td>
<td></td>
</tr>
<tr>
<td>Reduce Customer Outages KPI 1</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>EFFECTIVELY USE TECHNOLOGY CSF5</td>
<td>▲</td>
<td></td>
</tr>
<tr>
<td>Implement Excellent Cyber Security Program KPI 1</td>
<td>![ ]</td>
<td>▲</td>
</tr>
<tr>
<td>Improve Productivity Through Technology &amp; Automation KPI 2</td>
<td>![ ]</td>
<td>▲</td>
</tr>
</tbody>
</table>
### INTEGRATED RESOURCE PLAN

<table>
<thead>
<tr>
<th>STRATEGIC ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase fuel diversity, mitigate fuel supply risk, and encourage cost-effective renewable energy</td>
</tr>
<tr>
<td>Comply with existing and future US EPA requirements including EGU MACT, RICE MACT, and SO2 NAAQS</td>
</tr>
<tr>
<td>Understand and consider financial and operational impacts associated with compliance and non-compliance with existing and future US EPA requirements</td>
</tr>
<tr>
<td>Support electric power service requirements for the DOD build-up and its economic consequences</td>
</tr>
<tr>
<td>Evaluate the economic feasibility of retiring or extending the life of its existing generation units</td>
</tr>
<tr>
<td>Reduce customer outages due to instantaneous loss of generation by examining operational and economic feasibility of using energy storage devices or requiring certain reliability enhancement characteristics for future generation additions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRIMARY RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain agreement with US EPA &amp; Guam EPA to suspend compliance with RICE MACT for Cabras 3&amp;4 and MEC 8&amp;9 until GPA completes transition to LNG</td>
</tr>
<tr>
<td>Procure an additional 40 MW of renewable energy under Phase II Renewable Energy Acquisition Program, if cost-effective with other available technologies, as early as 2017 to reduce present value costs. NOTE: 180 MW of renewable energy contracted in 2018</td>
</tr>
<tr>
<td>Develop the necessary infrastructure and contracts to engender transition from RFO to LNG by 2018 or sooner. NOTE: New power plant and pipelines for ULSD &amp; natural gas on bid</td>
</tr>
<tr>
<td>Retire Marbo CT and Dededo Diesels 1-4 by FY 2014</td>
</tr>
<tr>
<td>Firm up decision to retire Cabras 1&amp;2 and/or Tanguisson 1&amp;2 in 2018 concurrent with the availability of LNG. NOTE: All steam units to be retired after completion and commissioning of new power plant</td>
</tr>
<tr>
<td>Based on baseload retirement decisions, construct new 60 - 120 MW gas-fired combined cycle power plant, preferably in northern Guam to reduce technical line losses, online concurrent with the availability of LNG. NOTE: Bid for new 160 MW ULSD/natural gas plant underway</td>
</tr>
<tr>
<td>If Cabras 1&amp;2 or Tanguisson 1&amp;2 are not retired, complete conversion of these units to burn LNG concurrent with availability of LNG in 2018</td>
</tr>
<tr>
<td>Complete repowering of Piti 7 GE Frame 5B combustion turbine generator (CTG) into a combined cycle burning LNG. NOTE: Repowering is not economically feasible</td>
</tr>
<tr>
<td>Complete conversion of Cabras 3&amp;4 and MEC 8&amp;9 to burn LNG. NOTE: Cabras 3&amp;4 retired. Conversion of MEC 8&amp;9 after commissioning of new plant</td>
</tr>
<tr>
<td>If economically and technically feasible, build a 10 MW geothermal unit to come online in 2019. NOTE: Result of Phase II renewable bid indicates geothermal unit is not feasible</td>
</tr>
<tr>
<td>Work towards compliance with all new environmental standards and regulations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
<tr>
<td>COMPLETED</td>
</tr>
<tr>
<td>ON TRACK</td>
</tr>
</tbody>
</table>
Customer Convenience & Value-Added Services

TRANSPARENCY & ACCURACY
- New, easy-to-read billing statement and newsletter resulted in 25% reduction in mailing cost
- Redesigned billing statement garnered an ‘Award of Merit’ for Excellence in Public Power Communication from the American Public Power Association
- Successfully completed the new CC&B billing system for GPWA resulting in providing customers with ways to monitor their billings and consumption
- Robotic process automation reduced analysis of meter performance issues resulting in faster change outs and more accurate account information
- Timely and consistent outage notifications
- Enhanced website & web services
- Monthly newsletter distributed to all ratepayers to raise awareness of value-added services, initiatives and programs for all customers

CONVENIENCE
- Same day / same hour services (reconnections, disconnections) offered through advanced meter infrastructure
- Real-time monitoring and push notifications of energy consumption through www.myenergyguam.com
- Implementation of credit card payments to all customers including commercial. Cost to administer program substantially reduced while at the same time providing this ease of payment alternative to customers
- 24/7 Automated IVR Pay-By-Phone offers customers 24/7 account balance information and pay options via toll-free number phone
- Mobile APPs for ease of customer use and payments
- GPWA partnership to offer One Utility Customer Service

ACCOUNT SERVICES
- Expanded Customer Care Center to include phone, email, and social media interaction
- Timely onboarding of ~600 new customers per year
- Merge of CC&B information allows GPA & GWA CSRs to assist customers with cross-services
- Expanded system status and customer services notifications via social media, including outage information

INCENTIVES
- Continuation of Energy Sense Rebate, Demand Side Management (DSM) Program
- $1M return to ratepayers participating in DSM program from savings of bond refinancing
- Funding $2.8M from working capital for DSM program to assist ratepayers reduce their energy cost. This is in addition to the $1M funded from the refinancing of bonds
System Integrity & Reliability

STRENGTHENED ISLAND-WIDE POWER SYSTEM
- Completed installation of SCADA Project
- Continued changeout of wooden poles to concrete; 90% of system is concrete
- Continued village hybrid underground projects

ASSET PLANNING & MANAGEMENT
- GIS Network: First electric distribution utility to migrate to a production ESRI Utility Network (ArcGIS Pro and Utility Network), providing confidence to perform switching operations and maintain service to the island wide power system
- Mobile Workforce Management System: Implementing new program which will allow real time processing, scheduling and expeditious completion of new customer and existing system maintenance Work Orders
- Vehicle and Equipment Tracking: Continued to track movement of all GPA fleet to insure efficient and proper use of fleet
- Predictive Maintenance Program: Locate and fix equipment problems before they cause outages.

ISLANDWIDE POWER SYSTEM RECOVERY AND RESILIENCY
Minimized service interruption to customers following the Cabras 3&4 incident and mitigated the loss of 79MW of capacity:
- Contracted interruptible load with major commercial and government customers
- Contracted for 40 MW of lease-to-own temporary power from Aggreko
- Replaced aged Cabras 1&2 main transformers; $2M
- Rehabilitated 40 MW Dededo power plant; $10M.
- Replaced Machete combustion turbine; $2.7M
- Overhauled Cabras Steam $6.0M
- Overhaul of medium speed units $6M (ongoing)

STORM READINESS & RECOVERY
- Increased Resiliency & Restoration: Expeditious recovery from several storms, including Typhoons Dolphin and Mangkhut resulting in minimal service disruption and revenue loss
- Water & Sewer Resiliency: Acquired all GWA standby generators; GPWA
Partnership enabled GWA to maintain 99% of water service to customers during the last significant storm

- **FEMA Reimbursements**: Typhoon Dolphin $2.3M, Typhoon Mangkhut $4.3M

- **System Hardening**: Awarded new $5.6M underground system for Tumon Bay to protect our valuable tourism industry. Completed the Agat Hybrid Underground System project to over 500 Homes

- **Material Inventory**: Maintained about $12M system inventory in order to insure expedient recovery from Typhoons

- **Equipment Fleet**: Continued to replace aged heavy equipment fleet and increased bucket truck fleet in order to expedite typhoon recoveries

**NEXT GENERATION PLANTS**

- Acquisition of new 180 MW power plant ongoing ahead of consent decree or application of penalties, potentially saving millions of dollars. Contract award targeted for end of CY 2019

- Clean, efficient, economical technology will meet / exceed environmental regulatory requirements

- Efficient technology will reduce fuel oil imports by 17 million gallons annually

- New plant allows for diversified fuel mix

- Newer technology will allow additional incorporation of renewable energy (target 50% by 2035) resulting in substantial reduction of fuel cost and furthermore the stabilization of LEAC rate

- New plant location closer to population base & away from shorelines thus reducing line losses and storm/climate and natural disaster impacts such as tsunamis

- New plant location closer to over 60% of island load will improve reliability and allow some areas to receive power continuously during typhoons

---

**Managing Money**

**LOWER FUEL & ENERGY COSTS**

- No base rate increase since 2013

- Implemented new residual fuel oil contract with reduced premium

- Reduced the impact of increased fuel oil cost to the ratepayers through use of as much as $16M in working capital to cushion LEAC increases. The LEAC rate has been unchanged for 1 year despite the rise in fuel prices over the period. Recommended to hold LEAC steady through January 2020

- 120 MW solar PV plants commissioning in 2021 will save ratepayers (at today’s LEAC rate of $0.154/kWh) $19.5M annually

- 40 MW solar PV project targeted for award in 2019 and commissioning in 2021 is expected to save ratepayers about $5M annually

- Approvals to issue Renewables Phase IV Bid for an additional 120 MW by 2024 will be pursued later this year

- In regional rate comparisons, GPA maintains the lowest rates per kWh compared to other island power utilities including the Hawaiian Islands, US Virgin Islands and the CNMI

- Changed 6,000 HPS streetlights to LED saving $400K/year in fuel cost, 4,000 additional lights to be changed out in FY2019 and an additional 11,000 by the end of FY2020. Total savings to reach $1.2M Annually by end of FY 2020. GPA requesting the Government to utilize this savings to add an additional 2,700 new LED streetlights throughout the Island to improve island safety
FINANCIAL SOLVENCY
- Maintenance and improvements of credit ratings despite challenges encountered over this period including the loss of Cabras 3&4, Typhoons, and the negative impact of President Trump Tax Reform on the island’s economy

COST SAVINGS - O&M
- Consistently below annual O&M budget.
- Received ownership from Independent Power Producer for TEMES 7 plant, assumed O&M responsibility resulting in >$4M annual savings
- Received ownership of the MEC 88 MW power plant and renegotiated the MEC contract for 5 years, resulting in >$15M annual savings
- Consolidation of GPA & GWA operations into a single location at the Gloria B Nelson Public Service Building; $1M annual savings in GPWA rent; substantial indirect savings resulting due to co-locating operating efficiencies
- Robotic Process Automation (RPA) implemented to automate manual and time-consuming service order and work order process thus improving accuracies and saving significant manhours
- Labor FTE has decreased from 512 in FY2014 to the current manning of 470 FTE; Annual savings >$3M (excluding benefits)
- Reduced overtime of non-storm related activities from past years in excess of $2M to about $1.4 annually. This is despite the reduction of 42 FTE over the period

COST SAVINGS - CIP
- Bid in progress for new power plant to avoid millions in penalties and allow system to diversify fuel mix and achieve 50% renewables integration by 2035 and which will reduce and stabilize future LEAC
- Purchased and rezoned 60 acres of R1-zone property for new power plant at $10M. M1-zone (industrial use) land alternatives could have cost $16M thereby resulting in cost savings of about $8M. Optimal location of property (less than one mile from Harmon substation) resulted in $15M-$22M infrastructure savings

FINANCING & INSURANCE
- Successful bond refinancing to reduce annual payments by $500K at 4.12%, the lowest interest rate achieved by any GovGuam entity. Savings of $1M were returned to ratepayers through the funding of the DSM program (Energy Sense Rebate). Savings of $500K was dedicated to assist GDOE reduce its annual utilities cost.
- Reduction in cost of annual insurance premium by $2M
- Settlement of Cabras 3 & 4 Insurance Claim at $125.6M. $72M to be applied to new power plant to reduce annual capacity fee. This reduction in annual capacity fee will save ratepayers about $5M per year over the next 25 years
Investing in People

SUCCESSION PLANNING
- Identified, planned, and continue to implement programs to address the major issue that 57% of the GPA workforce could retire within the next 10 years

TALENT DEVELOPMENT & MANAGEMENT
- Annual employee evaluations completed, and adjustments implemented per pay-for-performance program
- Organizing comprehensive employee training program to enhance employee capabilities, present upward opportunities and career development
- Increasing intranet services allowing employees convenient self-service options
- Continuing successful Apprenticeship program to train future skilled force for difficult to hire skill sets
- Continuing seasonal internship program to attract future utility engineers, accountants and other professionals
- Working with Guam Department of Education to help prepare high school students for apprenticeship programs and career paths in the utility

- Promotes GPA & energy careers at outreach events

COMPENSATION STRATEGY
- Continue to migrate employee compensation to the 50th percentile salary market level in order to attract and retain employees. GPA currently at the 15th percentile and implementing a moderate and reasonable migration

AWARDS & RECOGNITION
- Consecutive 1st through 3rd place annual awards from American Public Power Association for safety excellence. Practicing and promoting safe practices and workplaces is our utmost priority. Receiving this award annually provides a benchmark of achievement of this goal. GPA received the First-Place honor for 2018 safety performance
- SAG award issued to GPA for being first electric distribution utility to migrate to a production ESRI Utility Network
- Mutual Aid Commendation received from American Public Power Association for assistance to CNMI Typhoon Yutu recovery
Investments in Energy Innovation & the Environment

ENERGY INNOVATION

- Integrated two Nissan Leaf Electric Vehicles (EV) into Authority’s fleet & business operations, with two charging stations. GPA to continue to replace aged fleet with EV most especially as more Original Equipment Manufacturers reduce EV prices
- Installed 275 KW Wind Turbine at Cross Island Road with a $2.1M grant from Department of Energy. Saves ratepayers fuel cost while gathering information for future wind projects
- Contracted for installation of 40 megawatts of utility scale battery storage by October 2019 to mitigate short duration outages caused by base-load unit trips and Solar PV intermittencies

DEVELOPING RENEWABLE ENERGY

- Installed 25 MW of solar PV renewables (Dandan) accounting for 3% of total energy sales
- Awarded 120 MW of solar PV renewables contracts at about $0.085/kWh with expected commissioning by Dec 2021, which will account for 18% of total energy sales and the reduction of fuel oil imports by 18.5 million gallons annually
- Bid in progress for 40 MW of renewables on land leased from the US Navy. This project will capture energy during the day and utilize all energy to offset higher peak energy production cost, which will account for 5.5% of total energy sales and the reduction of fuel oil imports by 5.5 million gallons annually
- New power plant project to be awarded in 2019 which would allow GPA to target 50% renewables by 2035 resulting in substantial reduction of fuel cost and furthermore the stabilization of LEAC rate
- Facilitated the expansion of the Net Metering Program to ~2,000 customers (estimated 22 MW in total connected systems)
- Completed Renewable Integration Study to prepare to increase renewable penetration above 25% into the system

CLEANER AIR & WATER

- New 180 MW Plant, Piti 8&9 conversion to ULSD, decommissioning of Cabras 1&2, and GPA’s Renewable Energy and Energy Efficiency Programs will significantly improve the air quality throughout Guam as well as significantly reduce GPA’s carbon footprint
- Decommissioning of Cabras 1&2 and 3&4 promotes healthier harbor ecosystem and eliminates thermal pollution effects on the reef
Community Partnerships

Island Partnerships

- Kicked off a sustainable tree trimming and pole painting program including a pilot partnership with nine (9) village Mayors.
- Successful Bond refinancing to reduce annual payments by $500K; $1M return to ratepayers participating in DSM program. $500K contributed to assist GDOE reduce its annual utilities cost.
- Obtained and assisted GovGuam agencies in obtaining grants. $2.1M GPA Wind Turbine Project; $500K for DPW Solar PV System; $1.25M for GDOE Lighting retrofits. These grants result in savings to ratepayers and these entities.
- Assisting Guam Energy Office on $64K for Energy Audits and creating Energy plans for individual schools.
- Assisted UOG in renovating an existing building energy with efficient equipment resulting in 50% to 75% savings from similar UOG buildings.
- Assisted Guam Memorial Hospital Authority by conducting preventive maintenance of their electrical system in order to avoid imminent electrical system failures which would impact patient care.
- Assisted the Department of Corrections in addressing their standby generators issues which when not available creates prison safety issues.
- Promote energy solutions and sustainable practices through participation and sponsorship of community programs such as the annual University of Guam’s Island Sustainability Conference.
- Promote utility initiatives and careers through school outreach program.
- Educates and promotes benefits of a publically-owned utility through community outreach events such as annual Public Power Week.

Industry Partnerships

- Active membership & participation with the American Public Power Association.
- GPA General Manager serves as APPA Region 10 Director; representing members from Guam, Commonwealth of the Northern Mariana Islands, American Samoa, Puerto Rico, US Virgin Islands, & Canada.

Mutual Aid & Assistance

- Successful assistance to CNMI Typhoon Yutu Recovery. GPA assisted for four full months resulting in labor savings of about $3M.
- GPA received a Mutual Aid Commendation from the American Public Power Association in recognition of its support in electric power restoration efforts for providing mutual aid assistance to the Commonwealth Utilities Corporation, Saipan.
2019 Forward

Key initiatives for 2019 forward include the following:

<table>
<thead>
<tr>
<th>2019+ INITIATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Strategic Plan</td>
</tr>
<tr>
<td>Update Integrated Resource Plan</td>
</tr>
<tr>
<td>Integration of Additional Renewables</td>
</tr>
<tr>
<td>Evaluate Economics of Diversified Fuel Mix</td>
</tr>
<tr>
<td>Optimize Reserve Margin Requirements</td>
</tr>
<tr>
<td>Implement Workforce Development &amp; Sustainability Policy</td>
</tr>
<tr>
<td>Implement Strategic &amp; Sustainable Training &amp; Compensation Programs</td>
</tr>
<tr>
<td>Develop &amp; Implement Disaster &amp; Typhoon Resiliency Policy</td>
</tr>
<tr>
<td>Continue Concrete Pole Hardening</td>
</tr>
<tr>
<td>Continue Underground Hardening Progress</td>
</tr>
<tr>
<td>Maintain Target Equipment &amp; Material Availability</td>
</tr>
<tr>
<td>Continue to Foster Mutual Aid Partnerships</td>
</tr>
<tr>
<td>Continue Customer Satisfaction Improvements</td>
</tr>
<tr>
<td>Conduct Customer Surveys &amp; Polls to Address Customer Needs &amp; Satisfaction</td>
</tr>
<tr>
<td>Implement Measures to Improve Overall Customer Experience</td>
</tr>
<tr>
<td>Continue Reliability Improvement Plan</td>
</tr>
<tr>
<td>Vegetation Management Program</td>
</tr>
<tr>
<td>Automation Generation Control</td>
</tr>
<tr>
<td>Hardening Changeouts to Composite Materials</td>
</tr>
<tr>
<td>Predictive Maintenance Programs</td>
</tr>
<tr>
<td>Continue &amp; Expand Energy Affordability Initiatives</td>
</tr>
<tr>
<td>Demand Side Management (DSM)</td>
</tr>
<tr>
<td>Revolving Loans</td>
</tr>
<tr>
<td>Lifeline Rates</td>
</tr>
<tr>
<td>Energy Audits</td>
</tr>
</tbody>
</table>

At the end of the GM's report, comments and discussion followed.

It was mentioned that relative to retiring of plants / decommissioning of plants – the GM has not given CCU his plans yet i.e. Cabras 4 and the Tanguisson plant. GM Benavente responded that this is the next phase; he said the engines may be sold but the bigger picture is the retiring of Cabras1&2. GPA does not have plans to build conventional plants at this location so he proposed to bid out the clean out of the facility and perhaps consider possible commercial revenue generating activity / business in that location. Comm. Lmtiacco asked what will happen to the fuel tanks. GM responded that they may be sold or moved out adding that there are (2) large 11million gallon tanks in the backside which will remain GPA property for fuel storage for the new plant being built in Okudo. GM said he will analyze these plans and report back the CCU.

Comm. Sanchez commented that management is very good at creating and reporting out all these improvements which is good however, he doesn't think the average ratepayer knows what we have done or what we are doing or planning to do including our elected leaders. He cited (2) takeaways - there is a need to improve our communication with ratepayers; we are not consistent in translating the improvements that are made and how it benefits the ratepayers. There are savings or other benefits
and nowhere is this summarized. We are streaming on the website but does anyone really watch it? He asked management to put themselves in the shoes of the average ratepayer. If we want to plant a seed... how do we show ratepayers what we are doing or how it benefits them – this is the challenge that he is struggling with. He used base rates as an example adding that we have not raised it since 2013 but how do we get this information to the ratepayers. He asked management that at the next meeting in July that we talk about how we can improve our communications especially with social media. How can we better engage our ratepayers? At the next meeting in July can management come up with a plan to see how we can use social media such as YouTube and Facebook to reach / translate all this good information to our ratepayers.

Comm. Santos asked if the (2) CFO’s can give the CCU a report relative to the value of GPA and GWA today. It bothers him that people think local people are not good enough to run the utilities. Let’s challenge the people of Guam - give me the price of what our utility is worth by the next meeting so we can let our ratepayers know – especially the “seem to be” experts that seem to think it is better to sell the utilities. There will definitely be an uprising if we sell our water. CFO’s please tell the Commission what our utility [both GPA and GWA] is worth.

Comm. Limtiaco said he agrees with Comm. Sanchez – the summary that GM Benavente has just shared contains so many improvements and the notion [that has been circulating the past few weeks] that management has not been reviewed is entirely inaccurate. This summary contains many projects and improvements by management that leads the Commission to evaluate and review our management team every day. We need to do a better job at communicating this to the public. Nobody remembers what management has done the last 4 years. We need to publish this information regularly. He used the whole issue with recent pay raises as an example – he mentioned that tonight he learned that payroll comes out of base rates [the GM concurred] and that base rates has not been raised since 2013. As commission we need to do a better job at communicating this fact to ratepayers because the perception is that power rates are going up because of these pay raises. There are numerous notable accomplishments that benefit the ratepayer but they are not aware of it.

The GM agrees that we do not do a good job at getting the word out. The reality it takes 12 people and 2 groups of people to get approval before any action can be done. He said this is a start and the next phase is to translate this to ratepayer benefits. Comm. Limtiaco added that all the things that management has done there is cost avoidance factors involved; we should let the public know this. Comm. Sanchez said we need to let people know that the utilities is in good hands. We need to be consistent to get the message out. Comm. Guthertz recommended a combination approach - social media, traditional media and report progress and cost savings. people want to know. Let’s express it in words that is easy to understand.

Comm. Sanchez - sometimes customer service reps are not singing the same song. Are we training our people well? Can we do better job? Our Internal customers [our own employees] need to understand what we have do, why we do it and the benefits so they can explain it clearly to the customers that they help. Comm. Sanchez used estimated billing as an example; ratepayers need to better understand the back billing process and why it is important.

4.1.2 Financials
No financial update was given at this meeting.
4.1.3 Resolution No. 2019-09 Relative to Authorizing GPA to contract for Unarmed Uniformed Security Guard Services

If approved, Resolution 2019-09 will ensure physical security and protection of the island’s critical electric infrastructure, GPA employees and customers.

Security Guard Services will be performed at the following locations (base scope of work):

1) Gloria B. Nelson Public Service Building, Fadian
2) Supply Warehouse, Storage Yard and T&D Service Center, Dededo
3) Dededo CT Power Plants, Dededo
4) Aggreko & Yigo CT Power Plants, Yigo
5) Tanguisson Power Plant, Lower Harmon Cliff Line
6) Cabras Power Plants, Piti

Option 1: Gloria B. Nelson Public Service Building
- 24/7 coverage; Operation of security kiosk, including recordation of visitor information & ID badges

Option 2: Roving Security Guard Services at 15 Locations
- Macheche CT & Substation
- Tenjo Diesel & Substation
- Tamuning Substation
- Tumon Substation
- Harmon Substation
- Agana Substation & Battery Storage
- Manenggon Diesels
- Barrigada Substation
- GAA Substation
- Pagat Substation
- Talofono Diesel, Substation & Battery Storage
- San Vitores Substation
- Piti Substation
- Anigua Substation
- Umatac Substation

Option 3: Monitoring of Security Surveillance (CCTV) & Alarms (24/7 coverage at GPA Security Command Ctr)

The cost of this unarmed security contract involves the following and will be funded with O&M Funds.

<table>
<thead>
<tr>
<th>Base Contract</th>
<th>Monthly</th>
<th>Annual</th>
<th>Maximum (2-yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$66,798.67</td>
<td>$801,584.04</td>
<td>$1,603,168.08</td>
</tr>
<tr>
<td>Option 1</td>
<td>$12,293.20</td>
<td>$147,518.40</td>
<td>$295,036.80</td>
</tr>
<tr>
<td>Option 2</td>
<td>$10,950.00</td>
<td>$131,400.00</td>
<td>$262,800.00</td>
</tr>
<tr>
<td>Option 3</td>
<td>$12,293.20</td>
<td>$147,518.40</td>
<td>$295,036.80</td>
</tr>
<tr>
<td>Total Possible</td>
<td>$35,536.40</td>
<td>$426,436.80</td>
<td>$852,873.60</td>
</tr>
<tr>
<td>Expenditure:</td>
<td></td>
<td></td>
<td>$2,456,041.68</td>
</tr>
</tbody>
</table>

The base contract term covers periods 06/01/19 – 09/30/19; 10/01/19 – 05/31/20 and the 1st year option to renew term is for 06/01/20 – 09/30/20; 10/01/20 – 05/31/21


In discussion Comm. Guthertz asked why the service is for unarmed guards with everything that is happening on island right now she is concerned about guards not being able to defend themselves should the need arise. The GM said this option was not included in the bid and said he would make a note to address / possibly include this option at the next bid process.
On the motion there was no further discussion or objection and the motion carried. The vote was 4 ayes and 1 absent.

5. **GWA**

5.1 **New Business**

5.1.1 **GM Report**
No GM Report was given at this meeting.

5.1.2 **Financials**
No Financial Update was given at this meeting.

5.1.3 **Resolution No. 37-FY2019 Relative to Approval of Contract for Construction of Upgrade of the Northern District Wastewater Treatment Plant, Project No. S17-003-OEA**

If approved, Resolution 37-FY2019 will allow GWA management to expand the NDWWTP to include secondary treatment which is required to meet the NPDES Discharge permit for the plant. The upgraded plant will include a new preliminary treatment system including screens and grit removal, secondary biological treatment system including oxidation ditches and clarifiers, ultraviolet disinfection system and sludge treatment system.

This project is an essential component of the infrastructure upgrades necessary to provide adequate treatment in compliance with current regulatory requirements for the protection of Guam’s water resources and marine environment, as well as to support the new facilities to be constructed as part of the military build-up. The project is urgent as prompt initiation of construction activities is required in order to meet the schedule requirements in the Grants and for the opening of the Marine Cantonment from which the plant will receive wastewater flows.

GWA Management seeks CCU approval for the proposed bid price of One Hundred Twenty-Two Million Seventy-Seven Thousand Eighty-Eight Dollars ($122,077,088.00); with a five percent (5%) contingency of Six Million One Hundred Three Thousand Eight Hundred Fifty-Four Dollars and Forty Cents ($6,103,854.40), the total authorized funding amount requested is One Hundred Twenty-Eight Million One Hundred Eighty Thousand Nine Hundred Forty-Two Dollars and Forty Cents ($128,180,942.40) and the funding source will come from US Dept. of Defense, Office of Economic Adjustment, General assistance Grants with additional funding from the System Development Charge (SDC) funds and or Bonds. The anticipated completion of the construction activities by the contractor is December 31, 2021.

It was mentioned that there were five (5) proponents for the Step 2 bids. Black Construction Corp was recommended as the lowest priced, responsive and responsible bidder.

Also, the GM mentioned that the OEA Grants are slated for more than this project which not all has been bid out or completed. Management is asking for the flexibility to move the funds around with the intent to maximize the grant funds.


Comm. Limtaco asked clarification what portion of the grant funds would be used for this project and the GM said about 116k initially, possibly more and the balance from SDC or bond funds.
Comm. Sanchez said this bid will benefit the largest portion of our WW community 95% paid by grants. It saves ratepayers significant sums of money. New customers who paid into the SDC will also help pay for this project so that existing rate customers will not have to pay for this project. But will now see a brand new WW treatment plant at no cost to them. He said he remembers the CCU meeting with General Bice [at the time] insisting that DOD help contribute to this project due to the military buildup. Comm. Sanchez said that all this was in place but someone had to coordinate / orchestrate all the moving parts to bring the project to fruition. GM Bordallo confirmed that OEA mentioned that they were looking at a 3rd party to do the project not GWA. It took 3 years and 5 months [since he was hired] to tonight where he is now asking CCU to award a bid that is being paid 95% by the federal government for the for the largest portion of our community and over the northern aquifer. This strikes me as a very good example of why we would want to reward a manager for not only doing his job but for doing it very very well. You saved ratepayers $300 Million on this project. We saved the PUC from having to consider an increase in rates because of this project. At the onset of this project - it was only a commitment. Comm. Sanchez told GM Bordallo - you and your team achieved a major accomplishment - this is the 2nd Secondary WWTP in the past 3-1/2 years. I will remember this at your evaluation. We need to do a better job to let ratepayers know what we have done. It is important to get the numbers and the history right.

Comm. Duenas added that this is a big project – bigger even that as big as constructing a big hotel.

Comm. Santos said that the new military base itself is not going to open until this plant is operational. It is a local company [GWA] that is doing it. OEA said to GM Bordallo under no circumstances you will go over budget and Comm. Santos said reminded GM Bordallo that he must pay close attention not to go over budget. He commended the GM for the confidence that OEA has in our management team.

Comm. Sanchez asked if OEA would have given us $173M if there was no confidence in GWA - more projects coming from this bucket of money. He reiterated that (5) elected officials [CCU] went to OEA 9 years ago asking them to help us ratepayers. This is a very momentous moment.

Comm. Limtiaco commended GM Bordallo for a job well done and thank you for doing your job. He asked if this will this be a new revenue stream for GWA [which will keep rates low for the ratepayers]. GM confirmed yes and will even save the ratepayers money through water purchase by the Marine base that will offset against the water that GWA buys from the Navy, more savings for the ratepayers.

On motion the vote was 5 Ayes; the motion to approve Resolution 37-FY2019 passed unanimously.

5.1.4 Resolution No. 36-FY2019 Relative to Approving the Five-Year Financial Plan and Capital Improvement Program

The objective of the 5-year Financial Plan and Capital Improvement Program is to present the first five-years of capital improvement projects adopted under the 2018 Water Resource Master Plan update, as well as projects necessary to complete the 2011 Court Order and other regulatory compliance objectives. The projects outlined in the Capital Improvement Program will be conducted island wide and will also provide for the continued modernization, operation, maintenance and repair of GWA’s water and sewer systems while the ancillary Financial Plan provides the revenues to support debt service on approximately $260 million in bond borrowing to pay for these much-needed capital improvements which will benefit all residents and visitors of Guam.
The Financial Plan addresses the 5-year period FY2020-FY2024 and includes: (1) estimated annual budgets for operations, maintenance and repair of GWA’s water and sewer system, including capital improvement projects; and (2) a detailed descriptive plan for raising sufficient revenue to meet the projected costs set forth in the budget.

Approval of the Five-Year Financial Plan and Capital Improvement Program is urgent and necessary to allow for the filing of a Guam Public Utilities Commission Rate Petition following approval by the CCU in an effort to get the matter on the agenda for decision by the PUC at its August 2019 meeting, if possible.

The total funding required for the Five-Year Financial Plan and Capital Improvement Program is $291,000,000 in CIP, of which $260,000,000 will be required in new bond issuances. Of the $260M requirement, $134M has already been approved by the Legislature and what we are asking for is the balance of $126M of legislative approval prior to 2022-2023.

Chairman Duenas said that this will be our 3rd 5-year plan.

GM Bordallo said that Public information initiatives have been conducted in the north, south and central villages as well as the Guam Chamber, Mayor’s Council, and provided a briefing for the Legislature and oversight chair and a briefing to the Gov/Lt Gov. will be done on June 28. The Plan was uploaded to the GWA Website - 37 people downloaded copy of the plan and several comments have been received but non substantive enough to make any changes to the plan.

Chairman Duenas said that the Mayors play major role in community - they are the ones that people go to first. They were very responsive to and support the proposed plans contained in the 5-year plan.


Comm. Sanchez said that this is a 5-year plan [the 3rd one] - $524M CIP [including 2019] of which $400 paid by ratepayers and $100 by Dept. of Defense. About half of the projects will be invested in water and the other half in waste water.

Comm. Sanchez also talked about goals and asked the GM his goal relative to this plan. GM Bordallo said with this plan his goal is to reduce non-rev water by 10% reduction within the 5 year period. Comm. Duenas asked reconfirmation if the GM mean leaks and other things like the use of the fire department is still not acknowledged at this point.

Comm. Sanchez said that the non-revenue water will be reduced by 20% which will produce savings for ratepayers. The 1st 10 years of rate relief is dominated by complying with the 2003 and 2011 court order. As the GM reported regularly, we are about 1 year off to complete this court order.

Comm. Sanchez said that now the focus will be on GWA projects - of the $500M only 26% is EPA related the rest is GWA related. GM Bordallo said he is working towards this goal.

You did some sensitivity analysis [base case] - the cumulative impact is 37.1% You also did another sensitivity analysis cumulative impact is 15% - moderate plan 32.5% [scenario 3]. You also did another sensitivity analysis – relative to our debt ratio - cumulative impact is 27.7%. With all these scenarios there are tradeoffs.
The Commission tonight can look at 4 scenarios and look at the tradeoffs. He thanked the GM for these analytics; is beneficial to the Commission.

Comm. Duenas said -if we lower the rate what does it mean for future rate increases. The GM said he provided the projected increases broken down in 5-year increments:

the first 5-year – 47% cumulative
the 2nd 5-year - 53.5% cumulative
the 3rd 5-year – 38% cumulative
the 4th 5-year – 25% cumulative

Comm. Sanchez said this rate design is front loaded and a burden on current ratepayers and under burdening for the future ratepayers.

Comm. Duenas said his concern by lowering the front end is the improvement of service where ratepayers can see the investment.

Comm. Sanchez said in past 10 years we have always hit coverage; GM said the debt service got better the 2nd 5-year. Comm. Sanchez said he believes that we can tolerate something less than 39% without adversely impacting CIP’s.

The discussion centered around the debate of whether to stay with the 38% cumulative or to lower the rate in the plan to 32.5% Comm. Sanchez said he would like to move with the 32.5% to help ratepayers and GM Bordallo wanted to stay with the 38% to allow the utility to meet debt service coverage and prevent a spike.

Comm. Sanchez said with the 32.5% debt service coverage is covered and only 23M out of $400M in CIP will be delayed because it will help the ratepayers. He said if he wants to err, he would like to err on the side of the ratepayer because we have the true-up and the cash flow and if needed we can increase the rate in the future.

GM Bordallo recommended to stay with the 38% because it allows GWA to meet the targets of the indenture. Our goal is to maintain the 1.5 debt service coverage and prevents a spike.

Comm. Santos said that what if we stay with the 38% and then after the true-up if we can move it back down if needed.

Comm. Limtiaco asked about customer growth relative to the military and GM Bordallo said they are building their own water source.

Comm. Duenas said if we lower increase we have another major project with USEPA and it will force us to push it out further. Comm. Sanchez said it will give a reason to push it

Comm. Limtiaco asked the body to consider a 27.8% increase because it meets the debt service coverage and will not impact the ratepayers as much.

Comm. Guthertz asked management to translate the increases to dollars. GM Bordallo said for the residential customer bill at the end of the 5 years for the 38% with lifeline rates the average increase is
$13 cumulative; for the 32.5% it will increase by $12 cumulative; for the $27.75 it will increase by $7.15 cumulative.

GM Bordallo said that management does have an interest in cost savings. His point is that his higher priority is reliability before cost efficiency. He gave example of Navy water purchases

After a very long debate, the Chairman called for the question.

On the motion to approve the Resolution as written with the 38% scenario the vote was 3 ayes and 2 nays. The motion passed.

6. ANNOUNCEMENT

6.1 Next CCU Meetings: GWA WS 7/16; GPA WS 7/18; CCU MTG 7/23

The Chairman announced that the next CCU meeting would be a GWA work session on July 16, a GPA work session on July 18 and the regular monthly CCU meeting on July 23.

7. ADJOURNMENT

There being no other business to bring before the Commission, the meeting adjourned at 8:15 p.m.

Attested

[Signature]

JOSEPH T. DUENAS, Chairman

[Signature]

MICHAEL T. LIMTIACO Secretary