

GPA Strategic Issues

STAKEHOLDER MEETING #1
GPA INTEGRATED RESOURCE PLAN 2021

January 2021



Stakeholder Meeting #1

- Introduction to Integrated Resource Planning and the Stakeholder Process
- GPA Strategic Issues
- Assumptions & Inputs
- Existing Supply Side Resources & Services
- On the Horizon Programs & Projects
- Q&A / Open Discussion



Situation Analysis: Since the 2012 IRP...

- 2014 Completed Smart Grid Project (Smart Meter & AMI)
- 2015 First Utility Scale PV Contract Commissioned
 - Cabras 3&4 Power Plant (80 MW) loss due to fire
- 2016 Aggreko Commissioned 40MW Plant
 - 26.5 MW Dandan Solar PV Commercial Operation
 - 275 KW Cotal Wind Turbine Power Plant Operation
 - Demand-Side Management *Energy Sense Program* launched
- 2017 Phase II Renewable Acquisition Bid Launched
 - Phase I ESS Project Awarded to LG CNS
- 2018 Renewable Integration Study Completed (Joint GPA-Navy Project)



Situation Analysis: Since the 2012 IRP...

- 2019 SCADA System Upgraded
 - Contracted 120 MW of additional Utility Scale Solar PV
 - GPA Commits to 50% Renewable Portfolio by 2035
 - ECA signed for New 198 MW Power Plant
- 2020 COVID Pandemic (Load & Fuel)
 - USEPA Consent Decree signed
 - Completed Commissioning Tests of 24MW/16MW ESS
 - NEM Customers surpass 25.7 MW
 - New Power Plant System Impact Study Completed
 - Generation System Reliability Analysis Completed for USEPA (Will be Integrated into IRP)
 - Mobile Workforce Management System Project kick-off
 - Fiber and Radio Network Expansion



Situation Analysis: Since the 2012 IRP...

Today

- Expanding Energy Sense Program to Commercial Customers
- New Power Plant Project
- Renewable and Efficiency Projects
- Working Towards ESS Commercial Online Date March 2021
- Integrated Resource Plan
 - Generation Expansion Plan
 - Long Range Transmission Plan
 - Medium Range Distribution Plan Distribution
 - Energy Sense Program Rebate Level Reset
 - Environmental Strategic Plan Update
 - Strategic IT Plan
- Digital Transformation Projects
 - Energy Sense Rebate Application Online Web Portal & Smart Phone App
 - Mobile Work Force Management
 - Demand-Side Management Processes Conversion fro0m Manual Process to Digital Process

What drives GPA Policy & Plans?



- Technology
- Economics
- Reliability and Power Quality
- Customer Use (Load Shapes, Type of Loads)
- Operation & Maintenance Issues (Costs, Efficiencies, Grid Support)
- Regulations (USEPA, GEPA, Guam Laws, PUC)
- Customer Surveys/Input
- Strategic Leadership
- Risk Awareness and Management
- The Appetite to take on Reasonable Risk
- Opportunities
- Politics

What do you think?



Strategic Issues

- What does this mean? (Oxford Dictionary)
 - > Strategic "done as part of a plan that is meant to achieve a particular purpose or to gain an advantage"
 - Issue "an important topic that people are discussing or arguing about" or "a problem or worry that someone has with something"
- AGMETS' Strategy Definition
 - Strategy is defining and crafting the vision for the future and building a roadmap enabling this future
 - Strategy is about choices
 - What we choose to be and do; and,
 - What we choose not to be and do
 - Strategic Planning is defining Strategy and building the road map to achieve it.
- How do we use in our IRP Process?
 - Identifies areas that focus setup of assumptions and inputs such as developing forecasts, identifying resource options, defining modeling scenarios, concluding results.



2008 & 2012 Strategic Issues

- Fuel Diversity, fuel supply risk, and renewable energy;
- Supporting the electric power service requirements for the impending Department of Defense (DOD) build-up and its economic consequences; and
- Acquisition of new electric energy supply and its implication on human resource requirements and the Authority business model.



Additional 2012 Strategic Issues

- GPA must understand and consider the financial and operational impacts associated with compliance and non-compliance with existing and future United States Environmental Protection Agency in all of its business and operational planning;
- GPA must evaluate the economic feasibility of retiring or extending the life of its existing generation units;
- GPA must work to reduce customer outages due to the instantaneous loss of generation. GPA must examine the operational and economic feasibility of using energy storage devices or requiring certain reliability enhancement characteristics for future generation additions;
- GPA must comply with existing and future United States Environmental Protection Agency requirements including but not limited to: EGU MACT, RICE MACT, new one-hour SO2 NAAQS;



2021 Strategic Issues

- USEPA Consent Decree Compliance;
- Reducing and Stabilizing Costs;
- Increasing Reliability;
- Integrating Renewables;
- Leveraging Technology to Improve Affordability, Customer Service, Reliability, and Power Quality: Digital Transformation
- Pleasing Customers

What do you think?

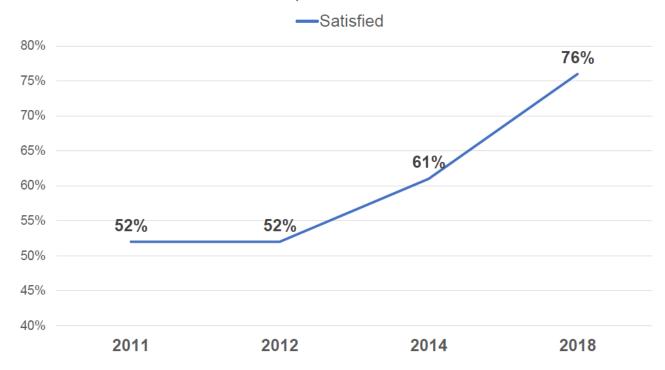


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Overall Satisfaction with GPA

Overall Satisfaction with GPA

All Respondents, N=403





Strategic Objectives

Grid Customer Experience Transformation

Foundational Infrastructure

Digital Transformation

Affordability Transformation

Digital Transformation



What do you feel are strategic issues GPA should focus on?

What are some alternatives you think we should consider?