



ENERGY
sense
Bringing energy solutions to you!



GUAM CLEAN ENERGY TRANSITION

APRIL 8-9, 2024
HYATT REGENCY GUAM



**CRAFTING A ROBUST ENERGY BASE FOR THE NEXT GENERATION
WE CARE. WE LISTEN. WE HELP.**

MAIN BALLROOM

GRID TRANSFORMATION & DIGITAL TRANSFORMATION

8:00 AM - 8:20 AM
8:20 AM - 8:30 AM
8:30 AM - 8:45 AM
8:45 AM - 9:00 AM
9:00 AM - 9:15 AM
9:15 AM - 10:05 AM

Guests Arrive
Opening
Opening Remarks
Welcoming Remarks
Other Remarks
Resiliency and Our Clean Energy Journey

BREAK

10:15 AM - 11:05 AM
11:05 AM - 11:55 AM

GPA intends to use novel technologies to improve GPA affordability, resiliency, stability, and reliability while delighting customers
Guam100 Project Scope and Progress

LUNCH

1:00 PM - 1:50 PM
1:50 PM - 2:40 PM

Phase IV Overview
Sizing Synchronous Condensers for GPA System

BREAK

2:50 PM - 3:40 PM
3:40 PM - 4:30 PM

GFL versus GFM inverters and how the use of GFM inverters will add stability to the GPA system
Concept of Hierarchical Controls as it relates to GPA's Grid Transformation and applications to other island and large interconnected grids

GPA AGMETS John J. Cruz Jr., P.E.
Governor Lourdes Leon Guerrero
CCU Chairman Joseph T. Duenas
PUC Chairman Dr. Jeffrey C. Johnson, DDS
GPA GM John Benavente, P.E.

GPA AGMETS John J. Cruz Jr., P.E.
Phil Voss & Murali Baggu, Ph.D.

Michael Murphy
Edgar Casale, Ph.D.

Anderson Hoke, Ph.D., P.E.

Tim Allen, P.E.

SANTA ROSA

1:00 PM - 1:50 PM
1:50 PM - 2:40 PM

GPA's Medium Range Distribution Study Results
Sandia Labs and GPA's work on large scale Distribution System Hosted Solar PV Systems: Issues and Solutions

BREAK

2:50 PM - 3:40 PM
3:40 PM - 4:30 PM

Citadel's ITC Micro grid Project and partnership with GPA
NREL funded Workforce Capacity Building Project supporting E&TS Succession Planning

Jaelene Manibusan, E.I.T. & Louis Camacho, P.E.
Brooke M. Garcia, P.E. & Thad Haines

Jim Beighley
GPA AGMETS John J. Cruz Jr., P.E.

MAGELLAN

1:00 PM - 1:50 PM
1:50 PM - 2:40 PM

GPA Solar Virtual Power Plant Program
GPA's Demand Response Program Progress

BREAK

2:50 PM - 3:40 PM
3:40 PM - 4:10 PM
4:10 PM - 4:40 PM

EV Charging Roadmap
Guam Energy Security Plan
Energy Security & Grid Resilience to Climate Change

Brian San Nicolas
Dan Rueckert, P.E., CISM

James Rosenberg II
Ashton Raffety
Charles Doktycz, Ph.D.



MAIN BALLROOM

GRID TRANSFORMATION & DIGITAL TRANSFORMATION

8:00 AM - 8:30 AM

Guests Arrive

8:30 AM - 9:20 AM

GPWA Communications and how it relates to GPA, GWA, and potentially Guam Cybersecurity and Guam Broadband

GPA AGMETS John J. Cruz Jr., P.E. & Laurie Tumaneng
Melvyn K. Kwek, CISA, GICSP

9:20 AM - 10:10 AM

GPA's recent progress in the area of cyber and physical security

BREAK

10:20 AM - 10:45 AM

Industrial Cybersecurity for OT Environments

Chuck Weissenborn
Matthew Tarduogno & Justin Cooksey
George Gamble, PMP, Six Sigma

10:45 AM - 11:10 AM

Energy Security, Resilience, and Response

11:10 AM - 12:00 PM

Guam Energy Security Plan - Cybersecurity

LUNCH

1:00 PM - 1:50 PM

Cyber Security Risks for Clean Energy Generation Systems

Fleur de Peralta, P.E.
Aaron Savatti

1:50 PM - 2:40 PM

GPA's Online Energy Audit Portal, Laying out the Technology Roadmap to Managing GPA Energy Efficiency Programs

BREAK

PANEL DISCUSSION: *Different insights on Clean Energy Transition in Islands*

2:50 PM - 3:00 PM

Power utility perspective

GPA AGMETS John J. Cruz Jr., P.E.
Joe Reed
Tim Allen, P.E.
Anupam Gopal

3:00 PM - 3:10 PM

Renewable developer perspective

3:10 PM - 3:20 PM

Control solutions provider perspective

3:20 PM - 3:30 PM

Clean Energy Transition - An Engineering Outlook

3:30 PM - 4:30 PM

Q&A

SANTA ROSA

8:30 AM - 9:20 AM

GE-GPA concepts for novel STATCOM system to increase GPA system stability in a predominantly Inverter Based Resource Grid

Rajib Datta, Ph.D.

9:20 AM - 10:10 AM

Grid Services provided by Malojloj BESS including integration of all Utility BESS Sites under Common Control to Manage Grid Services/41 MW Solar PV Malojloj Project

Zach Taylor, Ph.D. & Laurence Greene

BREAK

10:20 AM - 11:10 AM

BPA Cohort I Results

Francois Rogers
Logan Weber

11:10 AM - 12:00 PM

Renewable Integration Pathways for Islanded Systems

LUNCH

1:00 PM - 1:50 PM

Integration of GPA utility Scale BESS to improve and provide, GPA system resiliency, reliability, power quality, and survivability in a system dominated by IBRs

Tim Allen, P.E.

1:50 PM - 2:40 PM

Phase IV System Impact Study Methodologies

George Zhou, Ph.D., P.E.

BREAK

2:50 PM - 3:40PM

GPA-UOG-GEO Energy Auditor Workforce Capacity Building Collaboration

Victor A. Torres



MAGELLAN

8:30 AM - 9:20 AM

Discuss GPA's Energy Efficiency Programs including Energy Sense Rebate Program, UESC Program, BEST Schools Program, We CARE, Guam! Program, Energy Audit Program

Harvey J. Camacho

9:20 AM - 10:10 AM

Showcase DOD Energy Efficiency Projects

Allison Rutter, P.E.

BREAK

10:20 AM - 11:10 AM

Discuss GPA new capabilities with new Power System Modeling and Simulation Tools and Capabilities

Randall V. Wiegand Jr. & Louis C. Camacho, P.E.

11:10 AM - 12:00 PM

Discuss the E&TS Digital Transformation Initiative: Work Process Mapping, Implementing Work Processes on MWFMS

Christian Chargualaf

LUNCH

1:00 PM - 1:40 PM

Nuclear new-build experience in the EU (large and small plants), current situation

Tulkki Ville, D.Sc.

PANEL DISCUSSION

1:40 PM - 2:00 PM

How marine and ocean energy can power a blue economy on Guam

Fleur de Peralta, P.E. & Bastian Bentlage, Ph.D.

2:00 PM - 2:20 PM

Update on Ocean Thermal Energy Conversion Development and Uses

Dr. Andrea Copping

2:20 PM - 2:40 PM

Update on Wave Energy Converters Development and Uses

Jeff Grasberger

2:40 PM - 3:40 PM

Q&A

Fleur de Peralta, P.E., Jeff Grasberger & Dr. Andrea Copping

