THE CHANGING REGULATORY COMPACT – THE CUSTOMER, THE UTILITY, THE REGULATOR

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MAUI ENERGY CONFERENCE + EXHIBITION

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Lorraine H. Akiba, Commissioner Hawaii Public Utilities Commission March 26, 2015



HCEI 2.0 AND UTILITY 3.0

- ► 4R'S:
- ► RENEWABLE ENERGY, ON A RELIABLE GRID, IN A REALISTIC TIME FRAME, AT REASONABLE RATES
- ▶ Utility of the Future:
- Energy management services to provide customer choice and empowerment
- Customers are active partners in the utility transformation

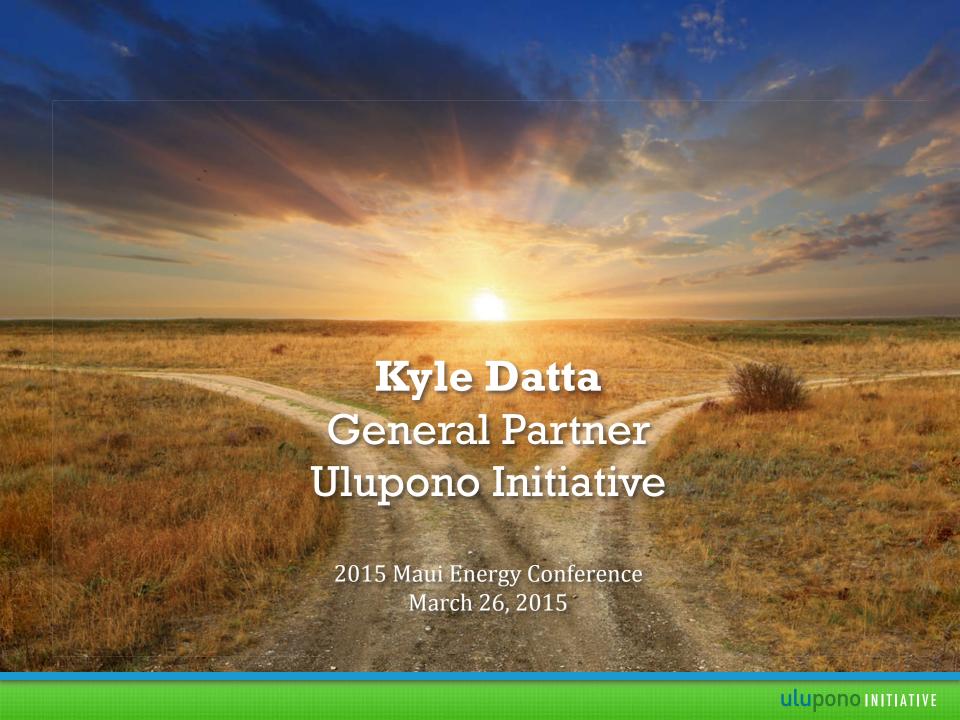
Policy and Regulatory Reforms to Achieve Hawaii's Clean Energy Future

- Recent directives and orders to Hawaii's utilities to implement new business models to become a world leading operator of a high renewable energy resource grid
- Regulatory policies and pricing also need to reflect these new business models with new incentives to achieve Hawaii's clean energy future
- Review and revision of pricing of energy services to reflect new business and technical demands

Recent Major Decisions and Orders to Implement the Integrated Grid

- ▶ Integrated Resource Planning Docket No. 2012-0036, Order No. 32052
 - ► White Paper entitled: "Commission's Inclinations on the Future of Hawaii's Utilities" which outlines the vision, strategies and regulatory policy changes required to align new utility business models with customer's changing expectations and state energy policy
 - Provided specific guidance for future energy planning and review, including strategic direction for capital investments in the integrated grid of the future

- ▶ Reliability Standards Working Group Docket No. 2011-0206 Order No. 32053
 - ► Adopted recommendations from the RSWG working group final work product for integrating utility scale and renewable energy resources in reliable and economic manner
 - Specific directives for actions to lower energy costs, improve system reliability and addressing emerging challenges to integrate additional intermittent renewable energy



Principles of Utility Regulation

BONBRIGHT PRINCIPLES (1960)

- Keep utility viable to provide safe and reliable power
- Fair apportionment of cost of service
- Promote economic efficiency
- Understandable to public and feasible to apply

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- Promote wholesale competition
- Align with Federal and State Energy Policy
- Promote innovation

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TECHNOLOGICAL SHIFT (2010+)

 Compensate customer for net value to system <u>and</u> require them to pay for services used from system

BUSINESS MODEL

REVENUES

INCENTIVE

TARIFF DESIGN

FAIRNESS

COMPETITION

ENERGY POLICY

INNOVATION

1960-1990

BUSINESS MODEL

REVENUES

INCENTIVE

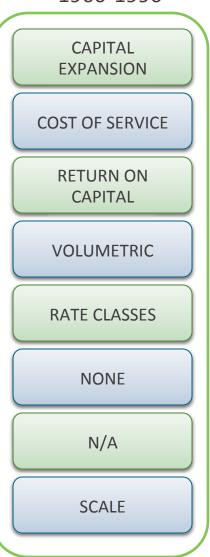
TARIFF DESIGN

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INNOVATION



1960-1990 **BUSINESS** CAPITAL **MODEL EXPANSION COST OF SERVICE REVENUES RETURN ON INCENTIVE CAPITAL TARIFF VOLUMETRIC DESIGN FAIRNESS** RATE CLASSES **COMPETITION** NONE **ENERGY** N/A **POLICY SCALE** INNOVATION

1990-2005 **TRADITIONAL COMPETITION COST OF SERVICE RETURN ON CAPITAL PBR VOLUMETRIC** RATE CLASSES WHOLESALE **GENERATION** (RETAIL COMPETITION) **ENVIRONMENTAL COMPLIANCE MARKETS**

BUSINESS MODEL

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INNOVATION

1960-1990

CAPITAL EXPANSION

COST OF SERVICE

RETURN ON CAPITAL

VOLUMETRIC

RATE CLASSES

NONE

N/A

SCALE

1990-2005

TRADITIONAL COMPETITION

COST OF SERVICE

RETURN ON CAPITAL PBR

VOLUMETRIC

RATE CLASSES

WHOLESALE
GENERATION
(RETAIL COMPETITION)

ENVIRONMENTAL COMPLIANCE

MARKETS

2006-2014 (HAWAI'I)

TRADITIONAL CONSTRAINED

DECOUPLING

RETURN ON CAPITAL

VOLUMETRIC

RATE CLASSES

WHOLESALE +
DISTRIBUTED
GENERATION

- RPS
- NET METERING

RENEWABLES EFFICIENCY

Co-Evolution of the Regulatory Compact: How do we align shareholders and ratepayers?

BUSINESS MODEL

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INNOVATION

INTEGRATED SYSTEM SERVICES PLATFORM

DECOUPLING TRANSITION TO RIIO

SHARED SAVINGS RETURN ON CAPITAL PERFORMANCE BASED

FIXED/VARIABLE

- TWO-WAY RATES
- RENEWABLE CHOICE
- EXIT CHARGES

WHOLESALE + DISTRIBUTED/SELF GENERATION

- RPS
- INTERCONNECTION
 ACCESS
- SMART GRID
- INTEGRATION
- DISTRIBUTED
- CUSTOMER SERVICES

WIRES/NETWORK

REVENUE CAP-RIIO-ED

- RETURN ON CAPITAL
- PERFORMANCE BASED

FIXED/VARIABLE

TWO-WAY RATES EXIT CHARGES

RELIABILITY
SELF GENERATION

- RPS
- GRID/CUSTOMER INVESTMENTS
- SMART GRID
- DISTRIBUTED
- CUSTOMER SERVICES

TRUST

Mahalo!

For more information visit www.ulupono.com



- ► Policy Statement and Order Regarding Demand Response Programs Docket No. 2007-0341 Order No. 32054
 - Specific guidance concerning the objectives and goals for demand response programs as distributed energy resources to be used by the utilities as generation resources
 - Requires integrated demand response portfolio that will enhance system operations and reduce electricity costs to customers

Mahalo!

For any questions, please contact:

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