

Performance- Based Regulation State Working Group

*Strategies for Developing Effective Performance Incentive
Mechanisms – Part 1 (Hawaii)*

*Expert Webinar
October 6, 2022*

Agenda

2:00-2:05 PBR SWG Updates

2:05 – 3:45 Expert webinar presentations followed by Q&A

2:45 – 3:00 PBR SWG roundtable on performance incentive mechanisms

Facilitators

Elliott J. Nethercutt, NARUC

Danielle Sass Byrnett, NARUC

Speakers

Moderator: Hon. Abigail Anthony, Rhode Island

Speaker: Grace Relf, Hawaii Public Utilities Commission

Logistics and Participation

- Please mute when not speaking.
- During the presentation portion today, please feel free to drop any questions into the chat and ask questions during Q&A.
- We will record and post the presentation portion on NARUC's website.
- After the presentation and Q&A for speakers, we will 'close the door' for a roundtable discussion among members that will not be recorded.

NARUC Performance-Based Regulation State Working Group

Working Group Chair: Commissioner Abigail Anthony, Rhode Island

Working Group Vice-Chair: Commissioner Dan Scripps, Michigan

Working Group – 30 Jurisdictions

- Arizona
- British Columbia, Canada
- Colorado
- Connecticut
- District of Columbia
- Delaware
- Georgia
- Hawaii
- Idaho
- Illinois
- Indiana
- Kentucky
- Massachusetts
- Maryland
- Maine
- Michigan
- Minnesota
- Missouri
- North Carolina
- Nevada
- Ohio
- Oregon
- Oklahoma
- Puerto Rico
- Rhode Island
- Texas
- Utah
- Vermont
- Washington
- Wisconsin

Please send any feedback or inquiries to enethercutt@naruc.org.



Performance-Based Regulation in Hawaii: Performance Incentive Mechanisms

Grace Relf, Hawaii Public Utilities Commission
NARUC PBR State Working Group Meeting
October 6, 2022

Presentation Roadmap

- Overview of Hawaii's PBR framework
 - Stakeholder engagement
 - Framework at-a-glance
- PIMs
 - Overview
 - Renewable Portfolio Standard Achievement
 - Advanced Metering Infrastructure
 - Cost Savings Sharing Mechanisms



High-level Process Overview

Phase 1 Decision:

- Establish goals & outcomes

Working Group:

- Propose mechanisms

Formal briefing:

- Written proposals

Phase 2 Decision:

- Establish framework

Working Group:

- Finalize details & tariffs

Ongoing:

- Assess performance & adjust



Stakeholder Engagement for Guiding Principles

Goal	Priority Outcome	
Enhance Customer Experience	Traditional	Affordability
		Reliability
	Emergent	Interconnection Experience
		Customer Engagement
Improve Utility Performance	Traditional	Cost Control
	Emergent	DER Asset Effectiveness
		Grid Investment Efficiency
Advance Societal Outcomes	Traditional	Capital Formation
		Customer Equity
	Emergent	GHG Reduction
		Electrification of Transportation
		Resilience



Hawaii's PBR Framework

Revenue Adjustment Mechanisms

- A 5-year **multi-year rate plan**
- **Allowed revenues adjusted annually** for inflation and a “customer dividend”
- An **Exceptional Project Recovery Mechanism** for extraordinary projects
- **Revenue Decoupling** to reconcile target revenues to what's collected

Performance Mechanisms

- Five new **Performance Incentive Mechanisms (PIMs)**
- Project/program-specific **shared savings mechanisms**
- Portfolio of **reported metrics**

Pilot process

- A framework for **expedited review for pilot projects** to incent innovative programs and projects

Safeguards

- An **Earnings Sharing Mechanism** to protect the utility and customers from excessive earnings or losses
- A **Re-Opener** mechanism that allows the PUC to examine all or parts of the PBR framework

Multi-Year Rate Plan: Structure

- 5-year control period
- Begins with current effective rates
- Modified annually based on an externally indexed formula:
 - **Annual Revenue Adjustment = (I Factor) - (X Factor) + (Z Factor) - (Customer Dividend)**
- Inputs are:
 - I Factor (inflation) = Gross Domestic Product Price Index
 - X Factor (productivity) = a pre-determined annual productivity factor set at 0%
 - Z Factor (exogenous events) = after-the-fact adjustment to account for events outside of the utility's control
 - Customer dividend = mechanism to ensure that customers share in the benefits of the PBR Framework



Performance Incentive Mechanisms (PIMs)

PIM	Objective
RPS-A	Accelerate achievement of Renewable Portfolio Standards (RPS) goals
Grid Services	Expedite the acquisition of grid services capabilities from distributed energy resources (DER)
Interconnection Approval	Improve customers' experience by incenting faster interconnection times for DER systems <100 kW
LMI Energy Efficiency	Encourage customer engagement, equity, and affordability by delivering energy savings for low-and moderate-income (LMI) customers
AMI Utilization	Promote customer engagement by accelerating the number of customers with advanced metering infrastructure (AMI) enabled to support time-varying rates, energy efficiency, and next generation DER programs

More PIMs!

PIM	Objective	Result
Cost Control	Reduce costs beyond HECO's "allowance"	Collective Shared Savings Mechanism (CSSM)
Grid Services - again	Improve the utilization of resources from DERs	Functional Integration Plan & continued work for long-term PIM
Grid-Scale Interconnection	Speed up and reduce costs for grid-scale interconnection	PIM to reduce Interconnection Requirements Study times
Generation Reliability	Ensure the grid is reliable for customers	Modified SAIDI / SAIFI PIM
Fossil Fuel Retirement	Retire fossil fuel generation in a timely manner	Fossil Fuel Retirement Plan

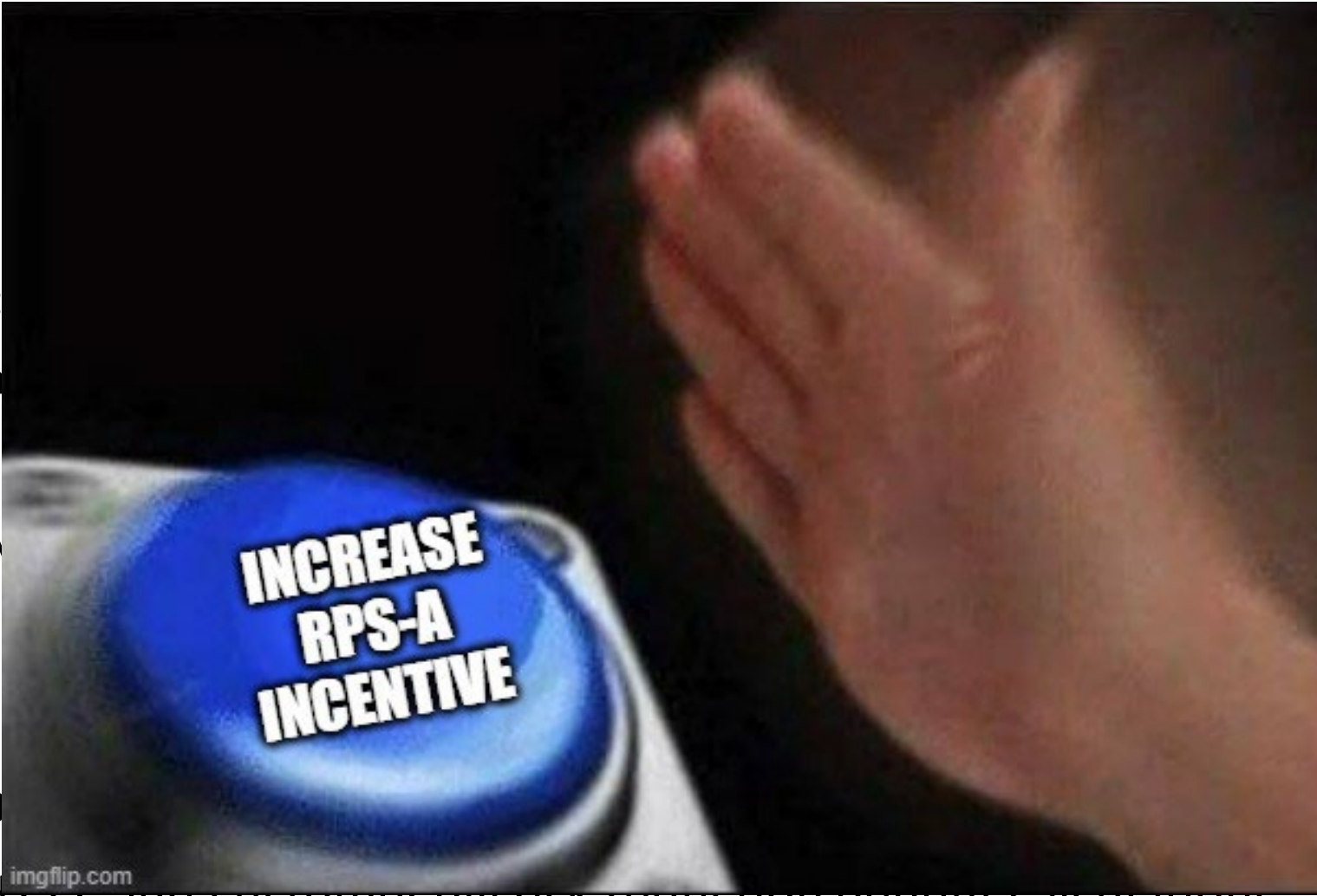
RPS-A

- Provides an annual reward for accelerated achievement of the RPS
 - Rewards:
 - 2021 – 2022: \$20/MWh
 - 2023: \$15/MWh
 - Remainder of term: \$10/MWh
 - Penalty: as prescribed in statute
 - \$20/MWh
- Proponents argued that it meets multiple PBR objectives, incents procurement at speed and volume, and is simple to administer
- **Benefit-cost analysis ranged from \$63 - \$98 / MWh**
 - Included CO₂ and customer bill risk reduction benefit calculations



RPS-A

- Provides a e RPS
 - Rewards
 - 2021
 - 2023:
 - Rema
 - Penalty:
 - \$20/M
- Proponent ents procurement
at speed a
- **Benefit-co**
 - Included CO_2 and customer bill risk reduction benefit calculations



Advanced Metering Infrastructure (AMI) PIM

- Reward for customers with AMI delivering at least 2 of 3 identified benefits of AMI:
 - Customer authorization to share data with 3rd parties
 - Customer enrollment to receive energy usage alerts
 - Customer enrollment in a next generation DER or time-of-use program
- Potential Rewards are between \$1 - \$2 million for meeting the following targets (% of total customers delivering at least 2 benefits):
 - 2021: 2.5 – 5%
 - 2022: 10 – 15%
 - 2023: 20 – 30 %



Performance

- 2021 RPS-A PIM:
 - Companies achieved 31.5% RPS
 - Recorded a reward of ~\$1 million
- AMI PIM:
 - Companies have requested modifications to the PIM citing challenges to benefit implementation
 - Requested modification of the target denominator
 - Requested modification to the benefits included

2021 AMI Utilization PIM Performance

Number of customers by Company with advanced meters installed and delivering the benefits listed below, divided by number of total customers, by end of year.

Benefit Category	HECO	MECO	HELCO
“Customer Authorization” Benefit	0.00%	0.00%	0.00%
“Energy Usage Alert” Benefit	0.03%	0.02%	0.03%
“Program Participation” Benefit	0.08%	0.08%	0.03%
At least two of the benefits listed above	0.001%	0.00%	0.00%



Collective Shared Savings Mechanism (CSSM)

- Objective:
 - Incentivize improved cost control over “non-ARA” costs
- Metric & target:
 - Savings compared to a base year amount of costs for fuel, purchased power, and exceptional projects
 - Adjustments are made to the base year amount for fuel prices, inflation,
- Reward:
 - The Companies can keep 20% of savings



A vibrant tropical landscape featuring lush green mountains in the background, a clear blue sky with scattered white clouds, and a foreground filled with tropical vegetation including palm trees and dense foliage. The scene is bright and sunny, with the greenery appearing very vibrant.

Mahalo!

Grace.e.relf@hawaii.gov

References

- Hawaii's PBR Framework; Docket No. 2018-0088
 - <https://puc.hawaii.gov/energy/pbr/>



Upcoming NARUC & CPI Events

- **R&D Spotlight: The Wyoming Innovation Center and New Market Opportunities for Coal Resources**
 - October 11, 2022 | 2:00-3:00 pm (ET)
 - Registration: https://uso2web.zoom.us/webinar/register/WN_gmhtHIZDTLuBQdYLBXqEvw
- **Financial Toolbox Webinar on ADMS/DERMS**
 - October 12, 2022 | 3:00 – 4:30 pm (ET)
 - Registration: https://uso2web.zoom.us/webinar/register/WN_qaeSgCstR4GTDHUwTVo9RA
- **Innovation Webinar on Long Duration Storage**
 - October 13, 2022 | 4:00 – 5:00 pm (ET)
 - Registration: https://uso2web.zoom.us/webinar/register/WN_Jy-vKHe3QXeVNRp2VS4seg
- **NASEO-NARUC GEB Working Group Virtual Forum: Demand Flexibility and Grid/Distribution Planning**
 - October 26, 2022 | 3:00-4:30 pm (ET)
 - Registration: https://uso6web.zoom.us/meeting/register/tZEuce2hqz8sEtzIGkhP24vbkoubQi-H_y66
- **NCEP Webinar on Transmission Needs Study**
 - November 18, 2022 | 2:00 – 3:00 pm (ET)
 - Registration: https://uso2web.zoom.us/webinar/register/WN_wDwOwixWQ5eo2VHbRZjhDQ
- **NARUC Annual Meeting and Education Conference**
 - New Orleans – November 12-16, 2022
 - Registration: <https://www.naruc.org/meetings-and-events/naruc-annual-meetings/2022-annual-meeting/meeting-home/>