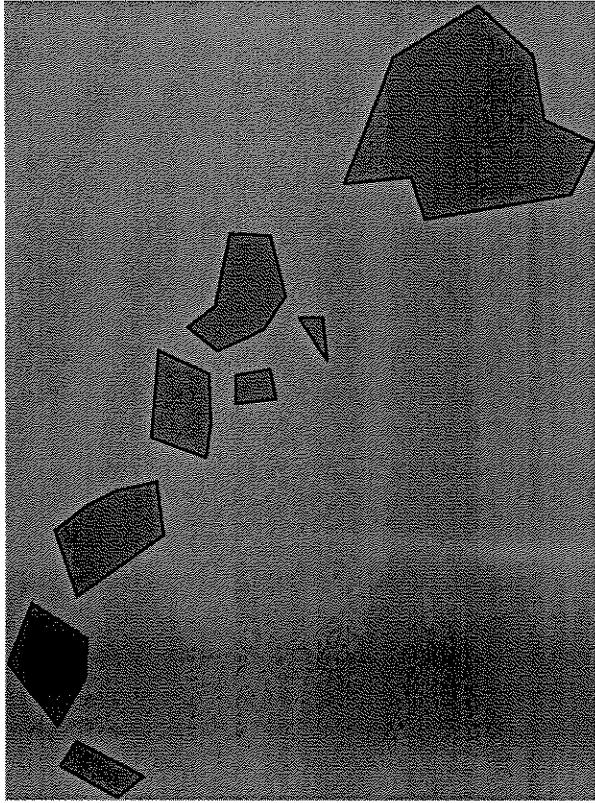


**Act 95 – PUC
RPS Workshop
November 22, 2004**

**Presented by:
Warren S. Bollmeier II
On behalf of the
Hawaii Renewable Energy
Alliance**

Presentation Outline

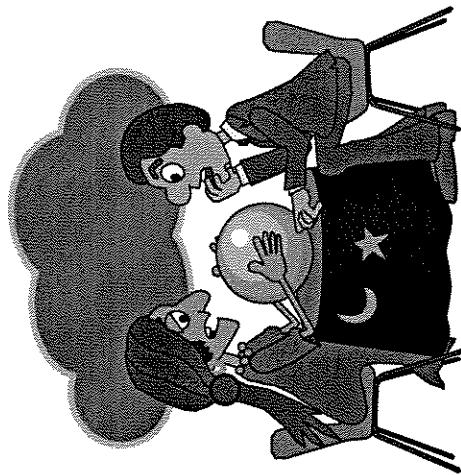
- 1. Regulatory Framework under RPS**
- 2. Regulatory Framework under PBR**
- 3. Power Market Simulation**
- 4. Designing Electric Utility Rates**



Regulatory Framework under RPS

Potential for Renewables and our RPS Law

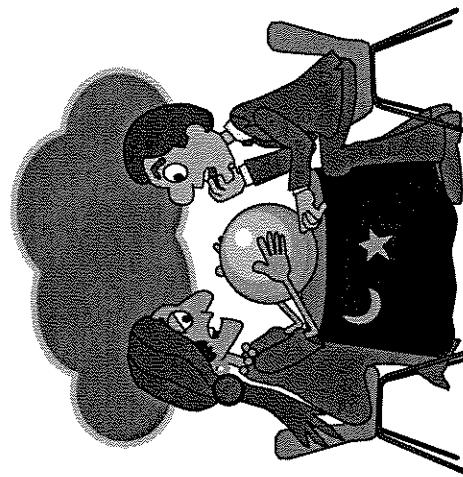
- Significant potential for renewables in Hawaii:
most recent study “Renewable and Unconventional Energy Study,” conducted for the Hawaii Energy Policy Forum by WSB-Hawaii
- Our RPS law differs from the RPS mainstream:
 - non-renewable sources, no analysis of energy-efficiency and energy conservation technologies
 - no penalties for non-compliance
 - no specific guidance on implementation



Regulatory Framework under RPS

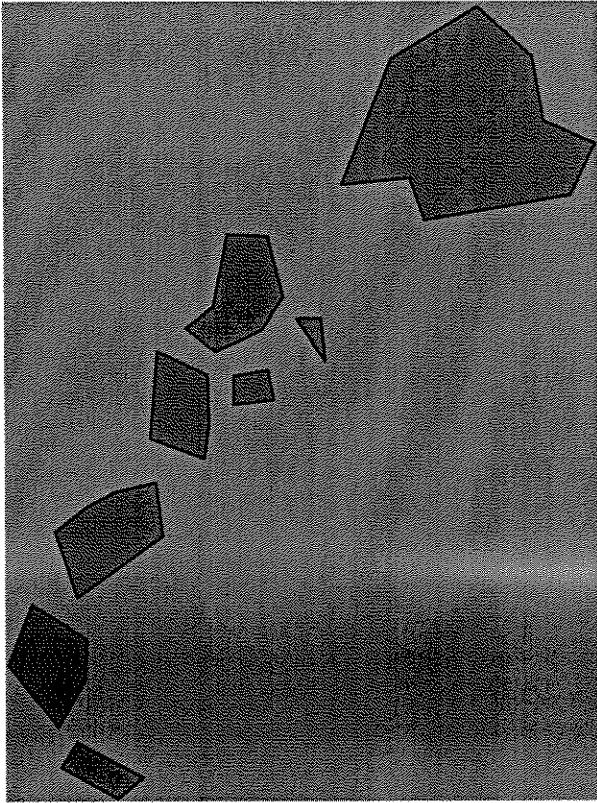
Recommended Actions

- Clarifications to the RPS:
 - rename the RPS law to be more descriptive
 - clarify “quantifiable energy conservation measures”
 - establish separate goals for renewables, energy efficiency, and energy conservation measures
- IRP as the implementation vehicle:
 - industry-developed projects ala PURPA
 - competitive bidding
 - utility ownership



Presentation Outline

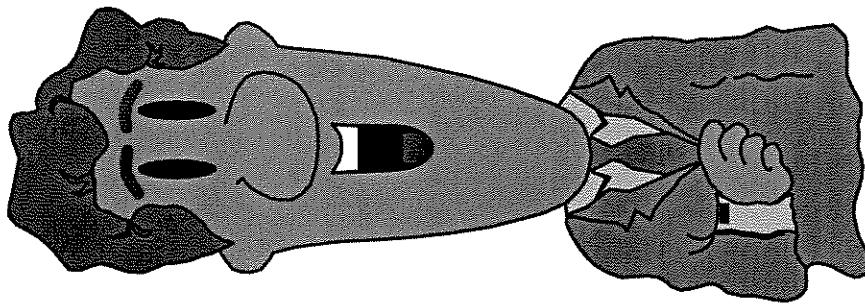
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Regulatory Framework under PBR

Regulatory Framework under PBR

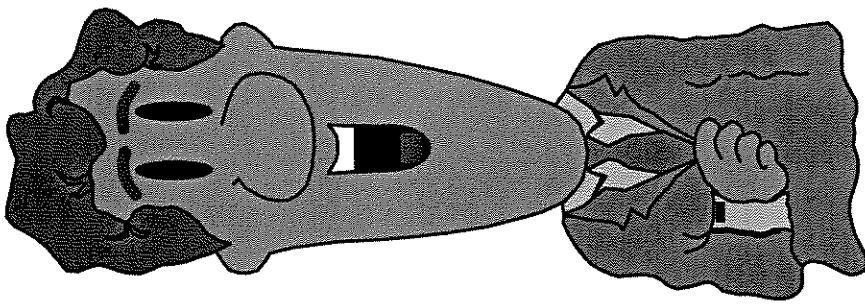
- HREA supports competitive bidding on new generation, including renewable projects, based on detailed goals and requirements developed in IRP
- HREA observes that PBR may or may not play an important role in the competitive bidding process



Regulatory Framework under PBR

Potential Role of PBR

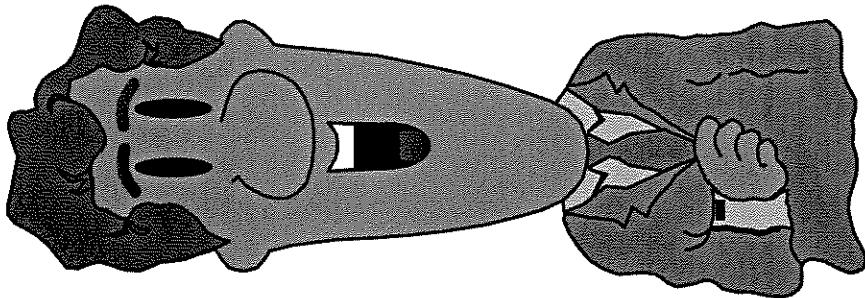
- If the utility owns/operates renewable projects and rate base their investments, would there need to be any additional incentive?
- If the utility is not allowed to compete directly, there could be a role for a PBR based on the utility's role in facilitating the process



Regulatory Framework under PBR

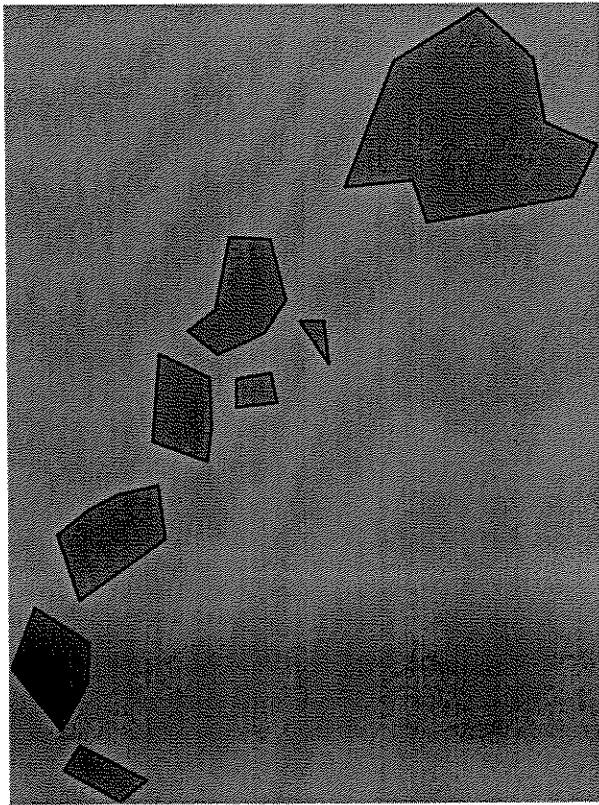
Success of RPS on the Mainland

- The utilities have employed a competitive bidding process
- HREA is not aware any mainland utilities that have installed and operated their own renewable facilities



Presentation Outline

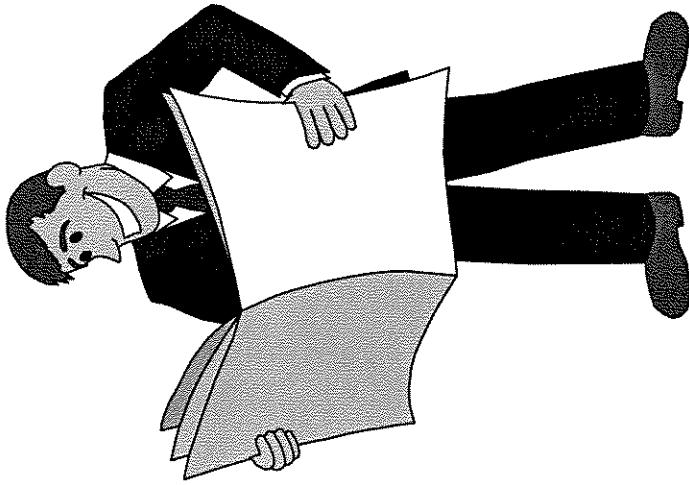
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Power Market Simulation

HREA Recommendations

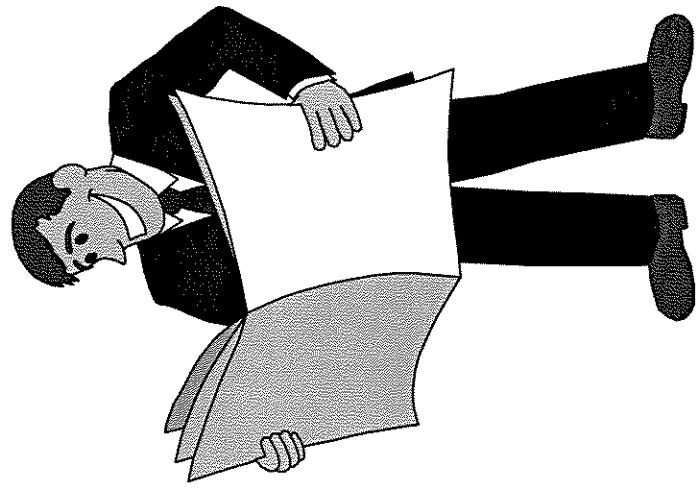
- Model all technology aspects of our "RPS" law
- Incorporate performance and cost estimates and competitive bids where possible
- Establish baseline simulation for the most current year where all relevant data are available



Power Market Simulation

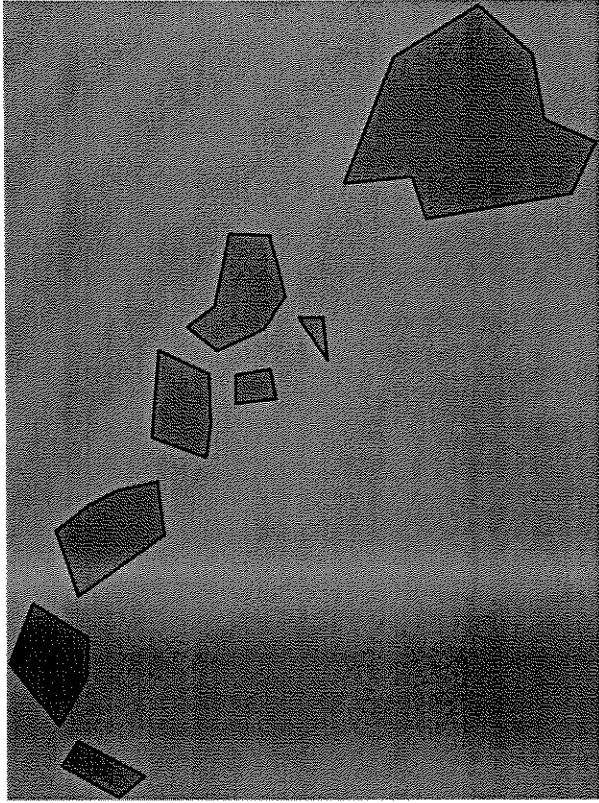
HREA Recommendations

- Perform the Status Quo simulation for at least 20 years
- Evaluate central generation vs. distributed generation options
- Include simulations that evaluate alternate utility rate structures



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Designing Electric Utility Rates

Importance of Overall Goals

- Ensuring correct price and rate signals are provided to electricity generators and electricity users/ratepayers
 - Implementation of RPS via a competitive bidding mechanism as a means for getting the price right
 - Removal of all cross-class subsidies in order to give the right price signal to the user/ratepayer
- Incentives to encourage users/ratepayers, as well as the utility, to invest in renewables

