Multi-Year Rate Plans

NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

CENTER FOR PARTNERSHIPS AND INNOVATION

PERFORMANCE-BASED REGULATION STATE WORKING GROUP

JUNE 3, 2020

The Performance-Based Regulation State Working Group is facilitated by the National Association of Regulatory Utility Commissioners' Center for Partnerships and innovation (NARUC CPI).

NARUC CPI thanks the US department of Energy for their ongoing support.

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Agenda

Multi-Year Rate Plan Considerations

- **David Littell, Former Maine Commissioner, Senior Regulatory Advisor at the Regulatory Assistance Project and Attorney at BernsteinShur**

Georgia's MYRP Experience

- **Jamie Barber, Georgia PSC Staff**

Washington's MYRP Experience

- **Amy Andrews, Washington UTC Staff**

Q&A/Discussion

David Littell
Former Commissioner

June 3, 2020

Performance-Based Regulation for Utility Efficiency: Multi-Year Rate Plans

NARUC

PBR Staff Working Group

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Overview

- Performance-based regulation background (only questions)
- Quick Look at how different PBR approaches alter the basic revenue requirement and rate calculations
  - Multi-Year Rate Plan
  - Performance Incentives
  - Riders
  - Decoupling
- PBR for Efficiency: Multi-Year Rate Plans

1 Performance-Based Regulation Basics

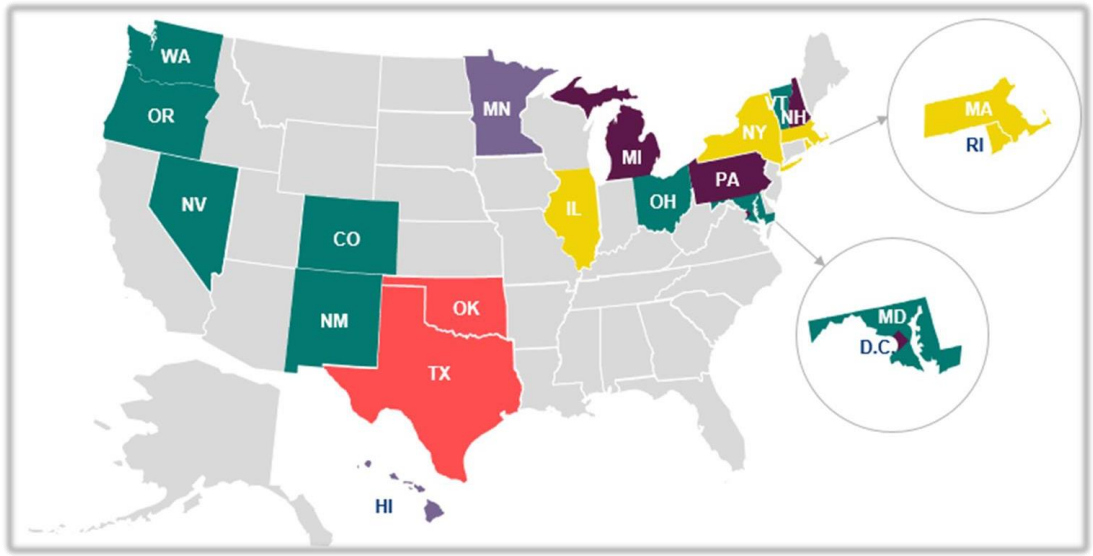
Performance-based regulation (PBR) is…

- A regulatory framework to connect achievement of specified objectives to utility financial performance and executive compensation
- A PBR plan can include a collection of **performance incentive mechanisms (PIMs)**, namely, metrics and formulas that determine the levels of financial rewards or penalties (i.e., adjustments to allowed revenues) for achievement of the specified objectives

States' progress in grappling with PBR is uneven

Various combinations of drivers are advancing PBR in 19 states and D.C.

- **Early Exploration:** Initial inquiries often marked by a report examining PBR options
- **Initial Stakeholder Engagement:** Soliciting comments and/or conducting workshops assessing PBR options
- **Advanced Stakeholder Engagement:** Soliciting comments and/or conducting workshops in discussing specifics of PBR options
- **Implementation:** Decisions have been made or are close to being made to deploy PBR options
- **Conclusion of Inquiry:** Decisions have been made not to consider the PBR framework



Source: EnerKnol and Wood Mackenzie Power & Renewables; Tracking of the proceedings available on the EnerKnol Platform

Set guiding goals

Photo: Heidi Sandstrom

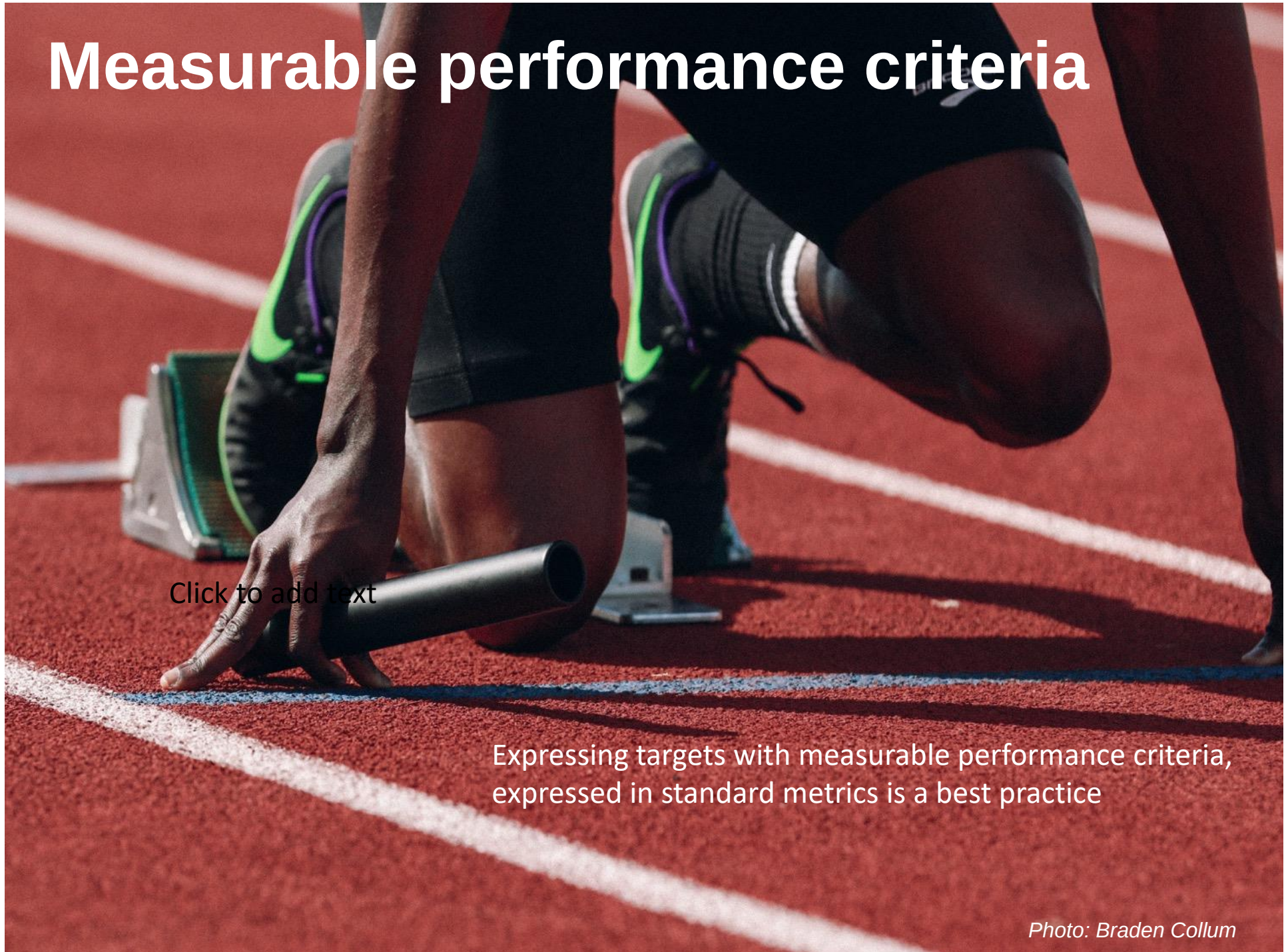
From the goals consider performance criteria (directional targets)

Guiding goal:
improve distribution system reliability

Directional target:
5% improvement in SAIFI from baseline value

Photo: Shirley Niv Marton

Measurable performance criteria



Click to add text

Expressing targets with measurable performance criteria, expressed in standard metrics is a best practice

Photo: Braden Collum

Metrics

- Quantifiable measure of a specified performance
- Typically expressed as standard **power system measures** or **consumer impact measures**

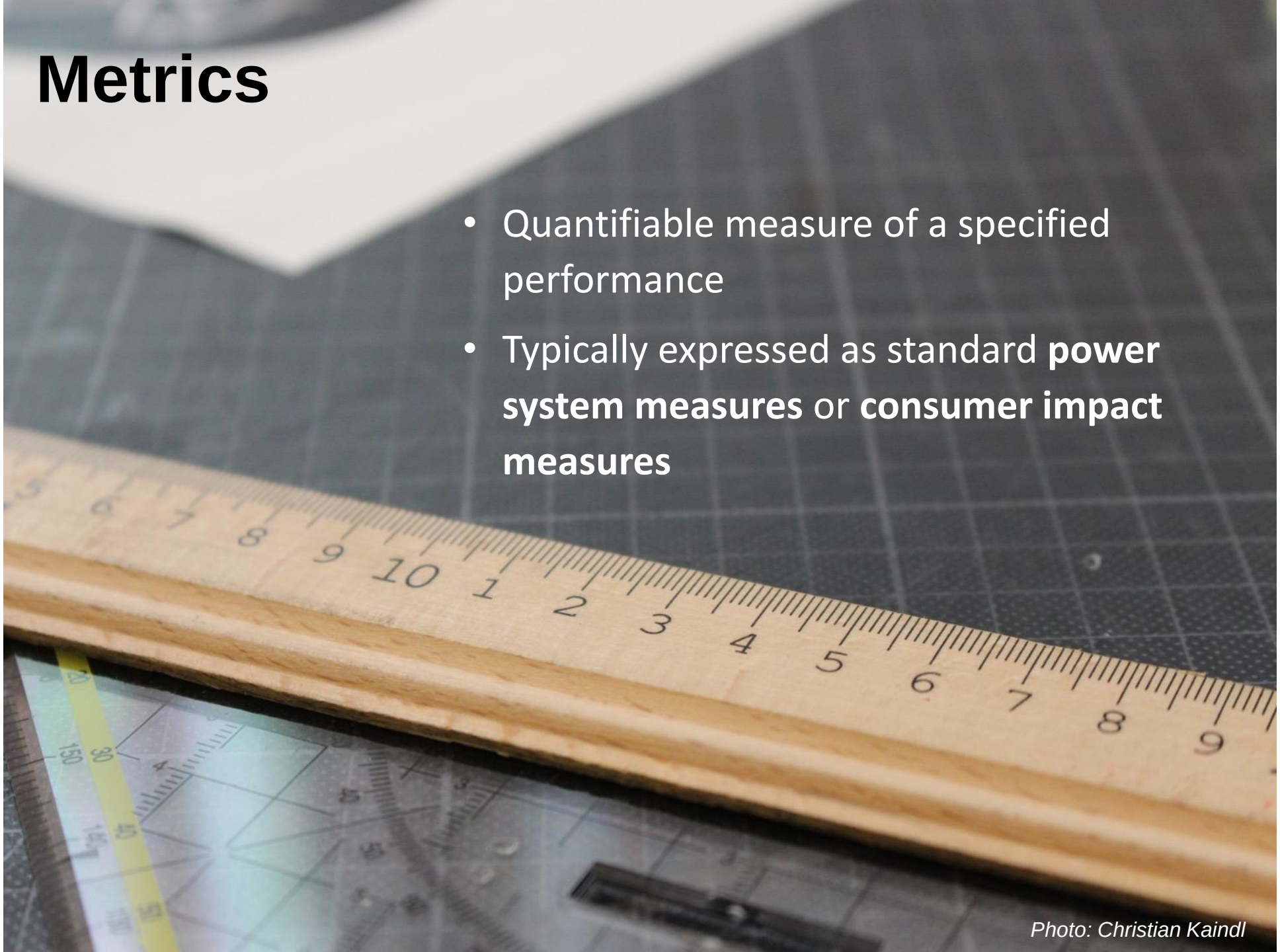
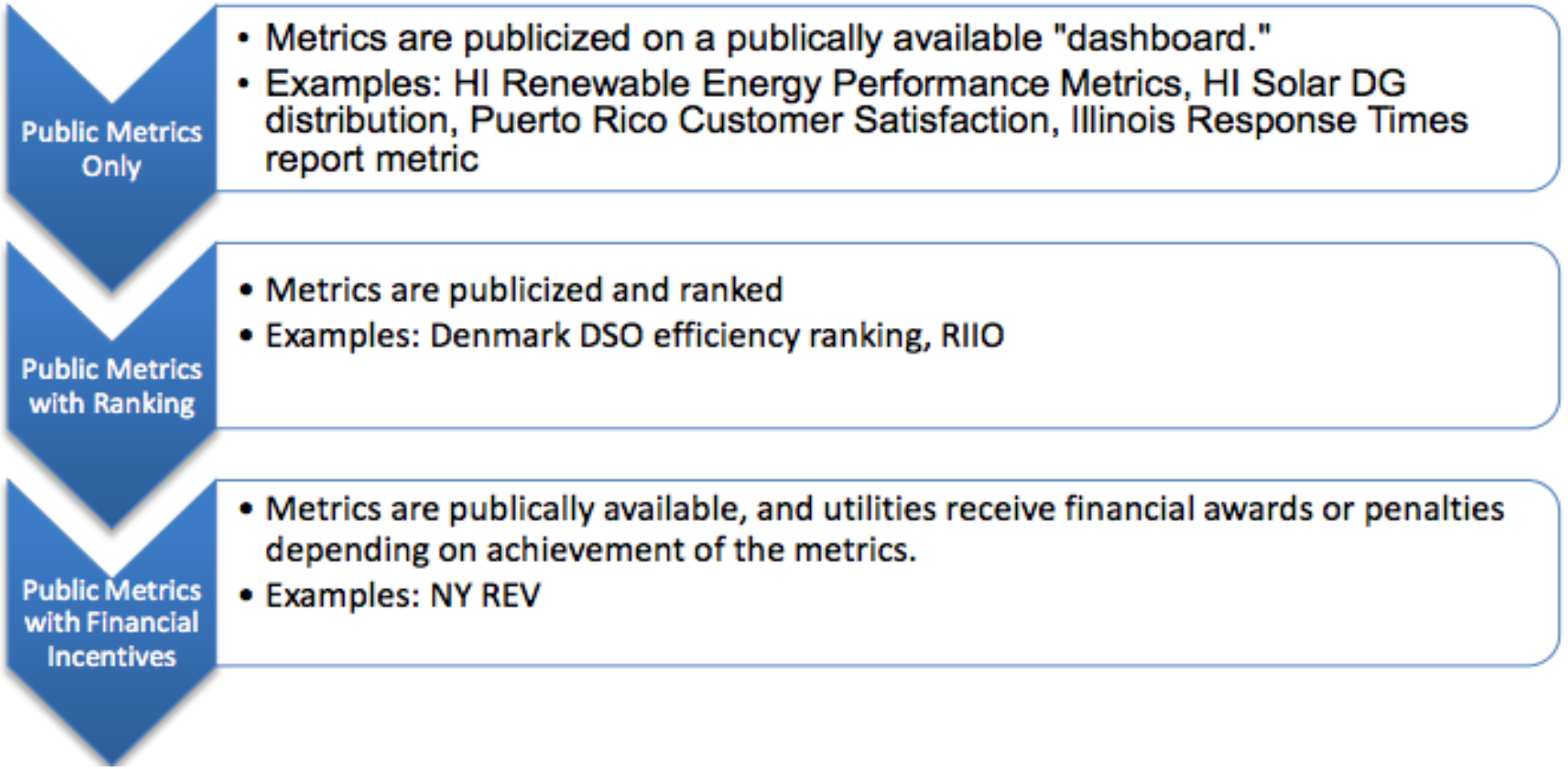


Photo: Christian Kaindl

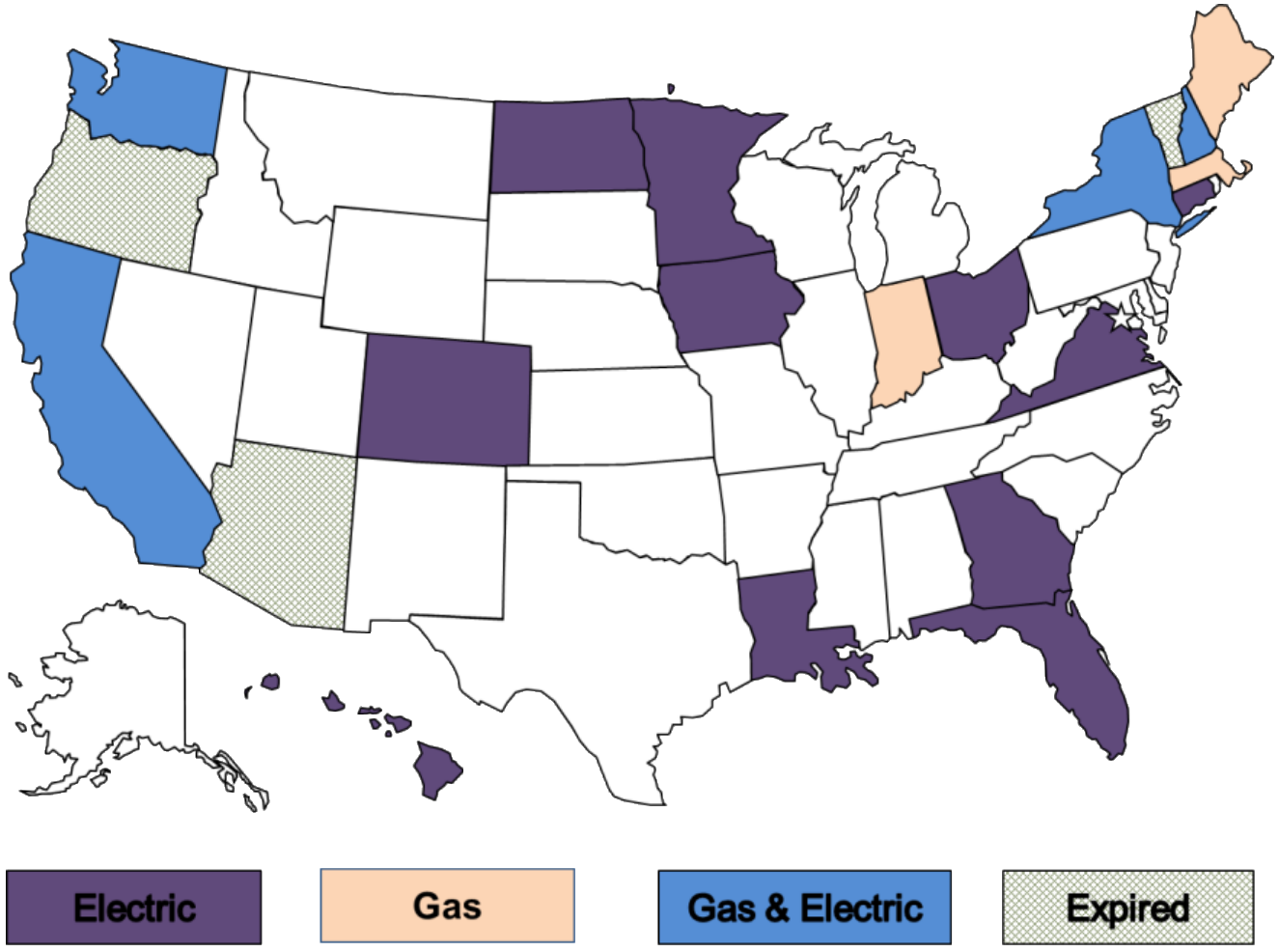
Performance criteria to metrics

- Quantifiable measure of a specified performance
- Typically expressed as standard **power system measures** or **consumer impact measures**
- Examples:
  - Service quality: improved customer service time
  - EE savings: measure % EE savings of utility sales or reduced consumer bills
  - Reduced outages: SAIDI / SAIFI / CAIDI / CAIFI

Photo: Christian Kaindl

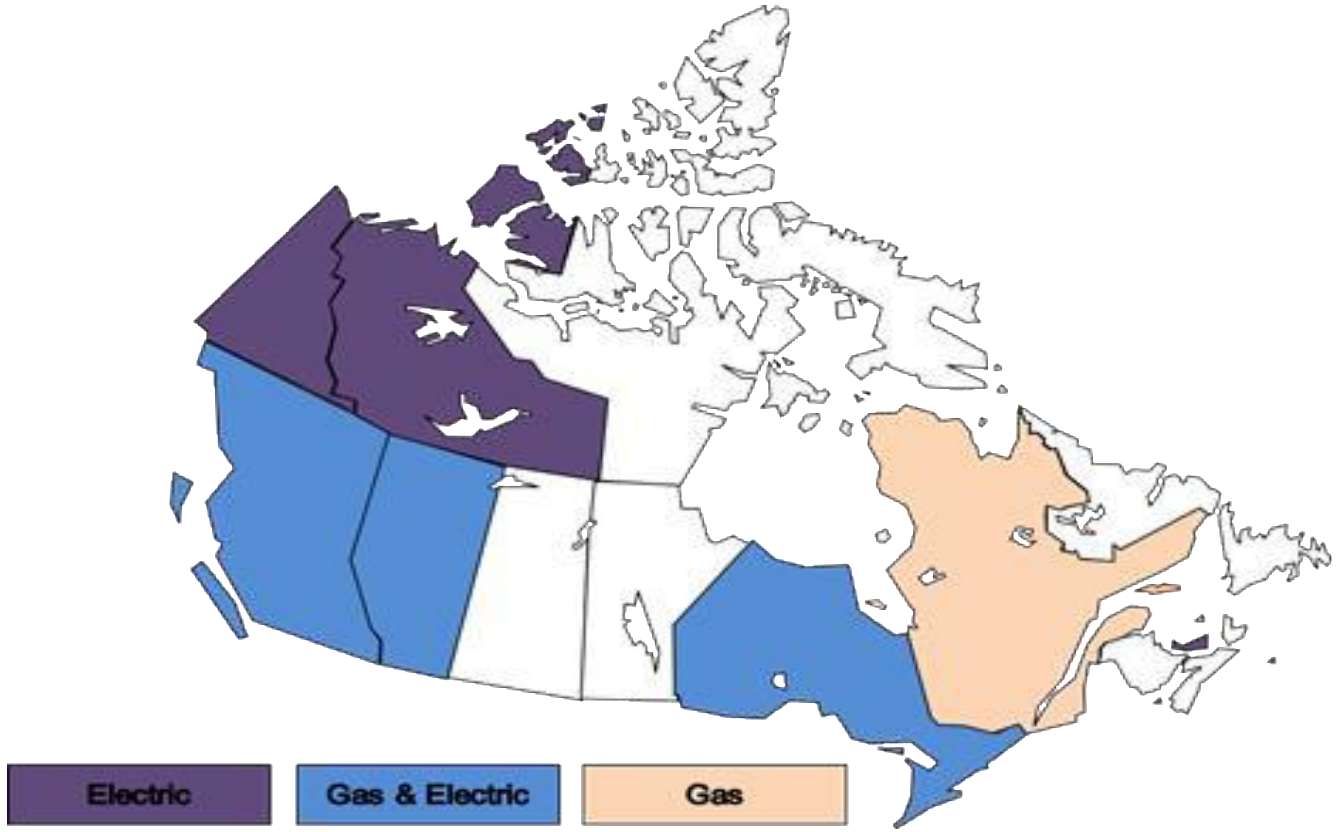

Public Metrics Only
• Metrics are publicized on a publically available "dashboard."
• Examples: HI Renewable Energy Performance Metrics, HI Solar DG distribution, Puerto Rico Customer Satisfaction, Illinois Response Times report metric
Public Metrics with Ranking
• Metrics are publicized and ranked
• Examples: Denmark DSO efficiency ranking, RIIO
Public Metrics with Financial Incentives
• Metrics are publically available, and utilities receive financial awards or penalties depending on achievement of the metrics.
• Examples: NY REV

Multi-Year Rate Plans in the U.S. (2017)



Source: M. Lowry et al. State PBR Using Multi-Year Rate Plans for U.S. Electric Utilities, July 2017; graphics: RAP & RMI

Multi-Year Rate Plans in Canada (2017)



Source: M. Lowry et al. State PBR Using Multi-Year Rate Plans for U.S. Electric Utilities, July 2017; graphics: RAP & RMI

2 Performance-Based Regulation Alters Traditional Cost of Service Revenue Requirement or Rate Calculations

Mechanics of Revenue Requirements for a Vertically Integrated Utility

< ---------- Rate Case Test Year ---------- >

Expenses + Return + Tax = Revenue Requirement

OPS & M + Fuel Purchased Power + Depreciation Amortization	Rate Base x Rate of Return	Income tax + Other taxes	Test Year Revenue Requirement

Source: C. Freeman, Existing Reg. Elements for HI Electric Companies, HI PUC PBR Workshop II, Sept. 2018

What Happens Between Rate Cases – *Historic way utilities did well*

O&M + Fuel P.Power + Depr. Amort.	R.Base x R.O.R	Income tax + Other taxes	Test Year Rev. Req.	At set: $ / kWh $ / kW $ / Cust

Changes During Period of Effective Rates as Sales, Demand, or Customers Grow

+ Sales => +$

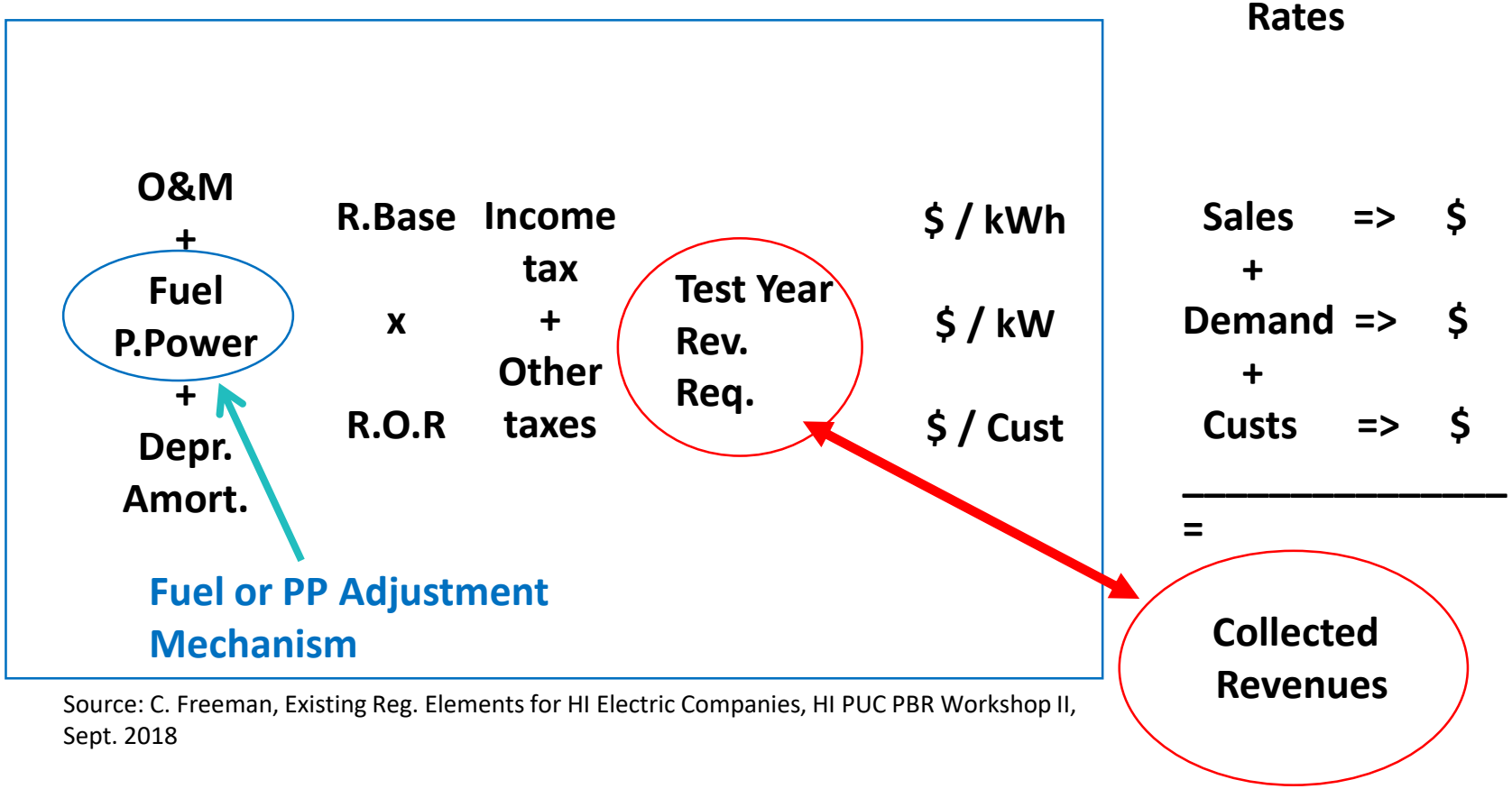
+Demand => +$

+Customers => +$

= + $ of Collected Revenues

Based on: C. Freeman, Existing Reg. Elements for HI Electric Companies, HI PUC PBR Workshop II, Sept. 2018

What Happens Between Rate Cases – Fuel Adjustment Clause



Source: C. Freeman, Existing Reg. Elements for HI Electric Companies, HI PUC PBR Workshop II, Sept. 2018

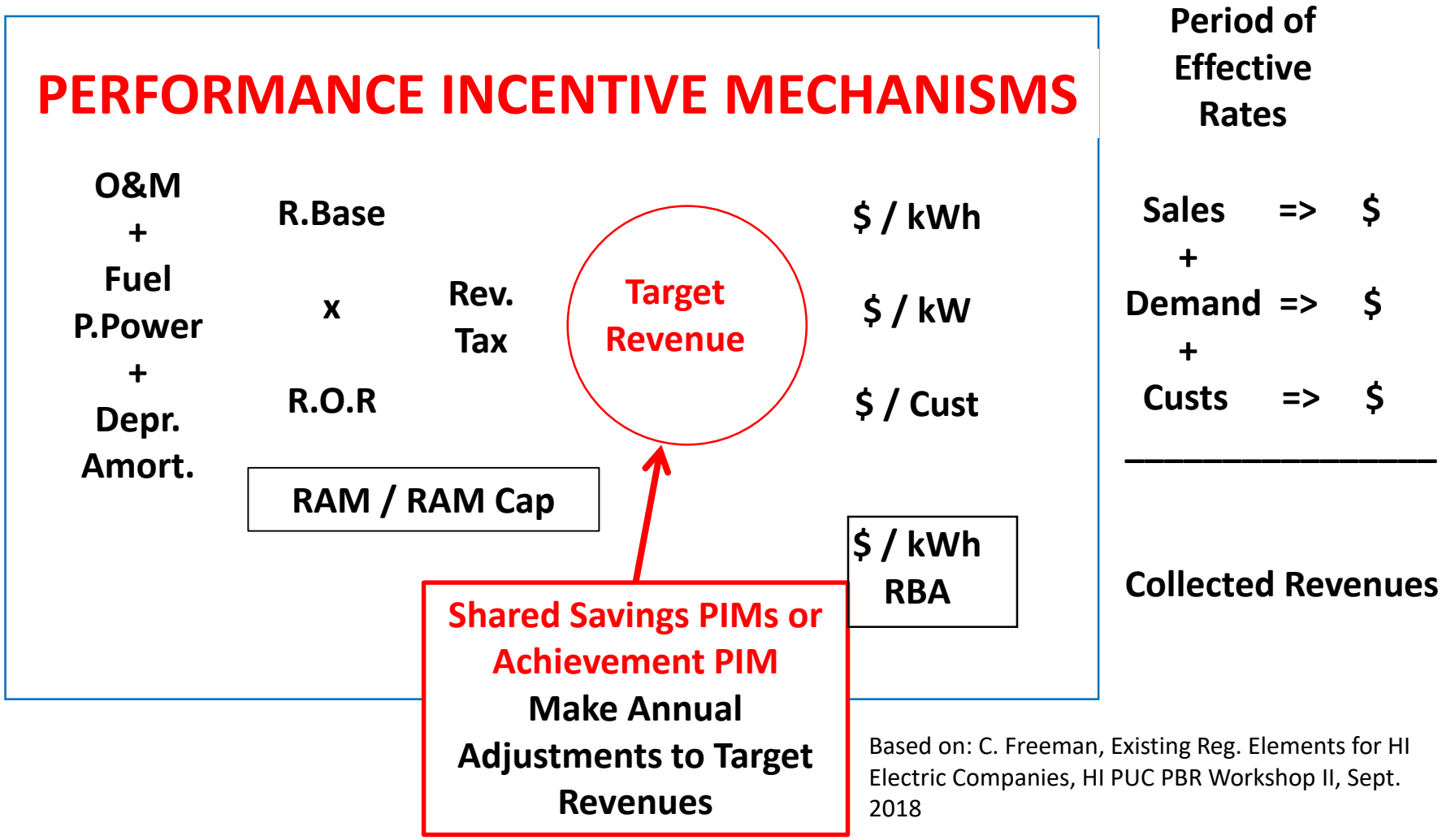
Mechanics of an MYRP for a Vertically-Integrated Utility

< ---- Rate Case Test Year --- >

Expenses	+ Return +	Tax	+ ARM	= Revenue Requirement = Rates	
OPS & M + Fuel Purchased Power + Depreciation Amortization	Rate Base x Rate of Return	Income tax + Other taxes	+ inflation – productivity index -or- + stairstep % -or- + tracker -or- + hybrid -or- + freeze	Test Year Rev. Req. + ARM adjustment periodically	$ / kWh $ / kW $ / Cust

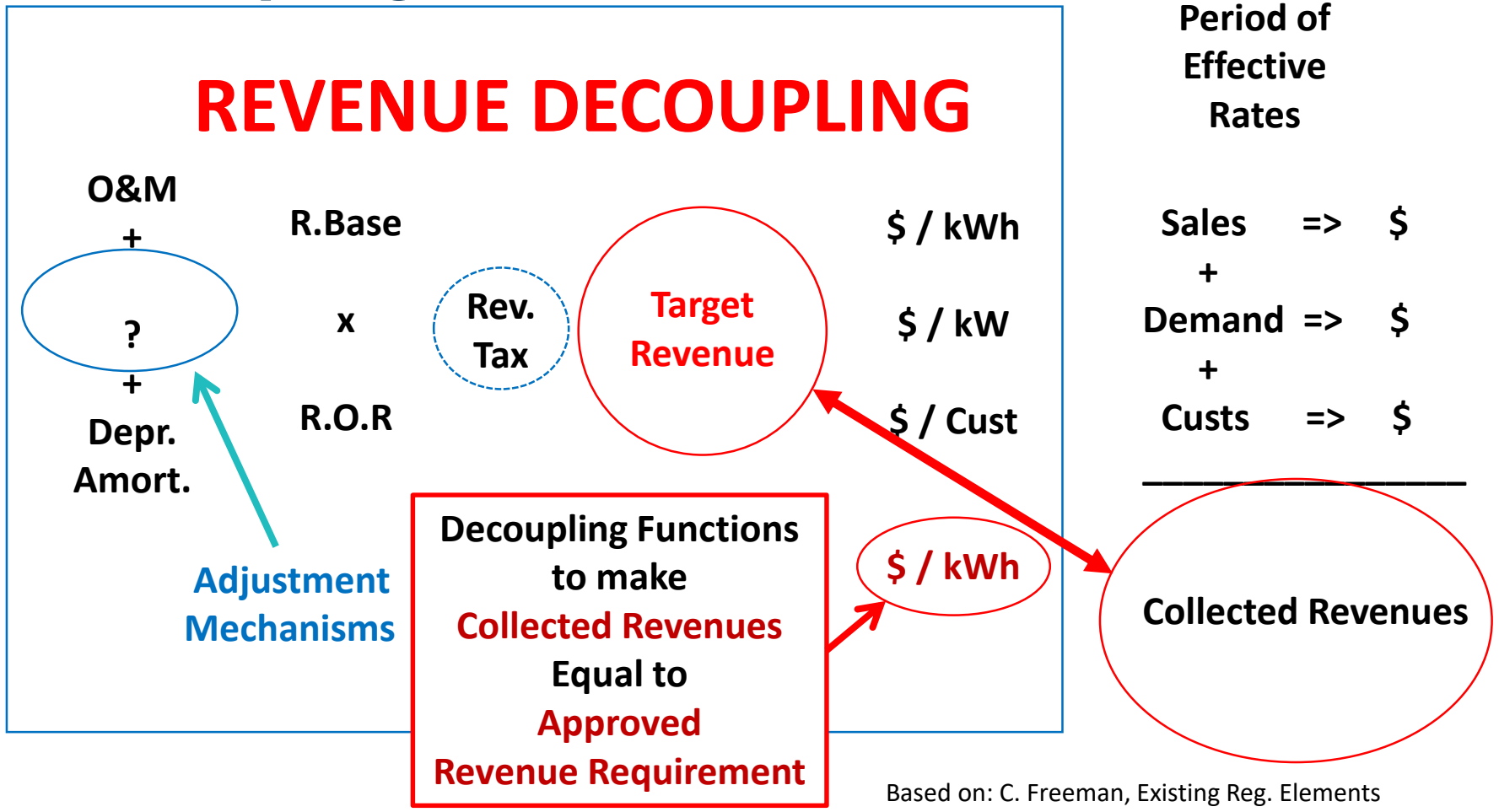
Based on: C. Freeman, Existing Reg. Elements for HI Electric Companies, HI PUC PBR Workshop II, Sept. 2018

PIMs – Long Term & Between Rate Cases



Based on: C. Freeman, Existing Reg. Elements for HI Electric Companies, HI PUC PBR Workshop II, Sept. 2018

What Happens Between Rate Cases - Decoupling



Based on: C. Freeman, Existing Reg. Elements for HI Electric Companies, HI PUC PBR Workshop II, Sept. 2018

3 Performance-Based Regulation For Utility Efficiency: Multi-Year Rate Plans

Why consider a Multi-Year Rate Plan?

A good MYRP aligns interests of utilities, regulators, customers – in contrast to traditional cost-of-service regulation

Reduce frequency of rate cases, freeing up Commission for other needs

Improve culture of utility management

Improve utility performance and lower utility costs

Strengthen incentives for utilities to improve performance & take for initiatives to yield results

Graphics credit: RAP & Rocky Mountain Institute (RMI)

Carte blanche for cost cutting is not the way to improve performance

Pacific Northwest Bell

Result:

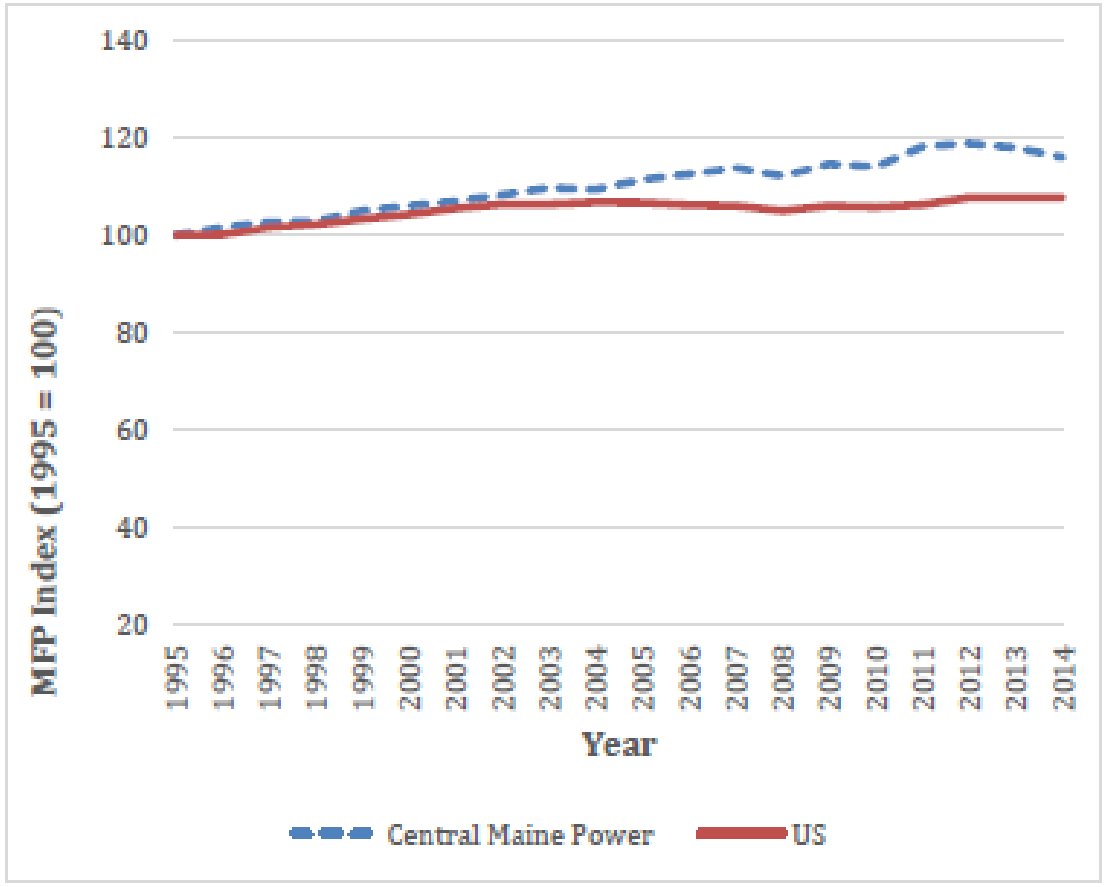
- Cut customer service
- Charged for customer service phone access
- Incentive to keep customers on hold

Lesson:

- Need customer service and reliability metrics

Photo credit: Quino Al on Unsplash

Productivity Growth of CMP with MYRP(s) vs. U.S. Utilities, 1992-2014



Source: M. Lowry et al. State PBR Using Multi-Year Rate Plans for U.S. Electric Utilities, July 2017.

What is a Multi-Year Rate Plan?

Key Components:

Rate case moratorium (usually a 3-5 year rate case cycle)

Attrition Relief Mechanism (ARM) allows for automatic relief from cost pressures, but is not linked to actual costs

Incentivizes cost containment: allow utility to keep some/all savings if efficient

Earnings Sharing Mechanisms can mitigate risk

Performance incentive mechanisms can be linked to MYRPs to ensure service quality

Other components can work simultaneously with a MYRP (e.g., decoupling, cost trackers, additional PIMs)

Graphics credit: RAP & Rocky Mountain Institute (RMI)

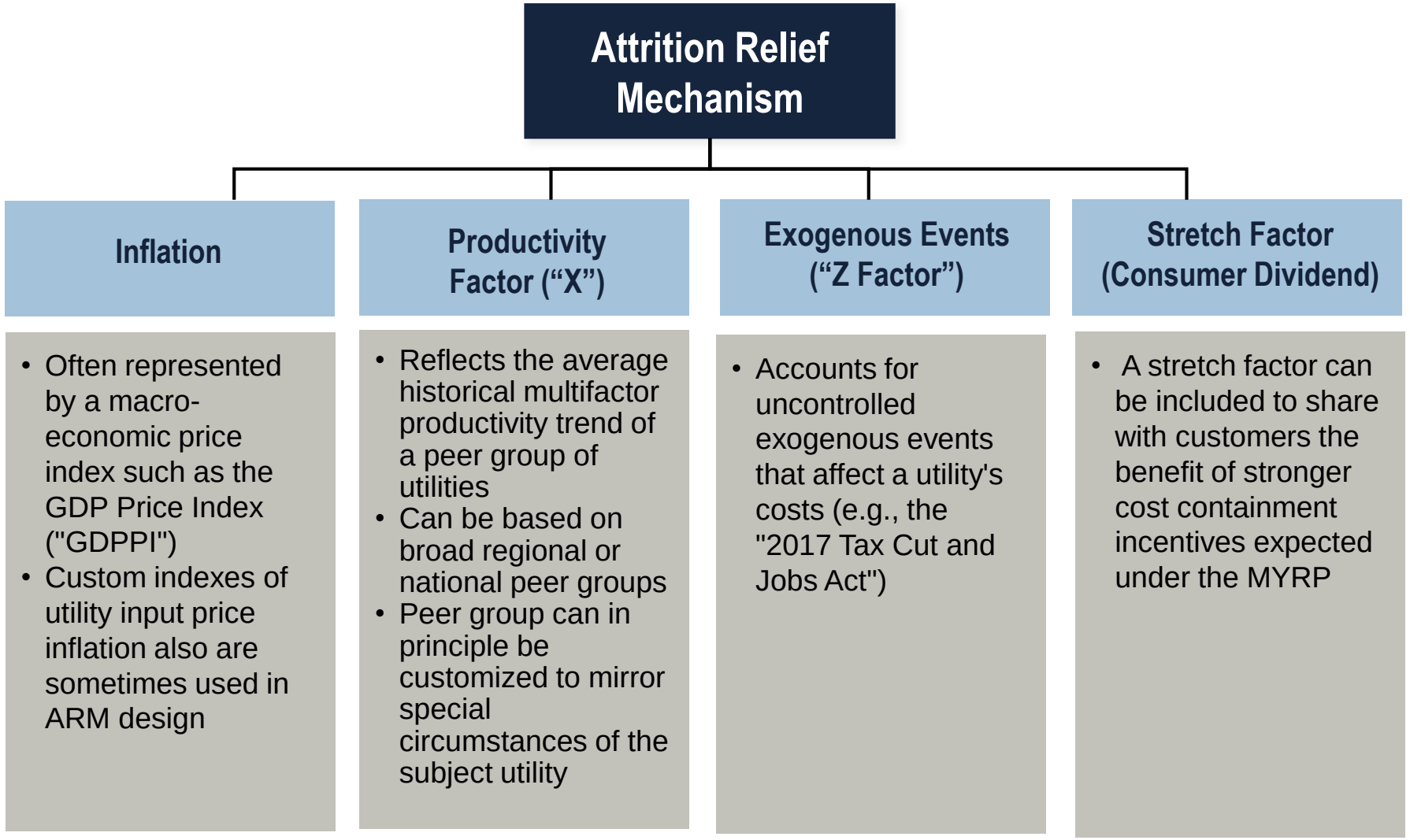
Multi-Year Rate Plans Feature Different Types of ARMs

Four Well-Established Methods

Forecasts	Indexing	Hybrids	Rate Freeze
• Rate adjustments during the MYRP period are based on cost forecasts • Adjustments typically increase revenue on predetermined percentage in a stairstep fashion each year	• An indexed ARM uses industry cost trend research to develop a base productivity trend that is then combined with other factors to arrive at a revenue cap index	• Uses a combination of methods • In the U.S., has been used so OpEx is indexed while revenue related to CapEx has a stairstep approach	• ARM provides no rate escalation; growth depends on billing determinants or tracked costs • Can exacerbate the throughput incentive unless combined with revenue regulation

Source: Lowry, Woolf. *Performance-based Regulation in a High Distributed Energy Resource Future*, Jan. 2016; graphics RAP & RMI.

Indexed attrition relief mechanisms (ARMs) tie utility revenues to external market factors instead of utility costs



Graphics credit: RAP & Rocky Mountain Institute (RMI)

Cost Trackers in MYRPs

Cost trackers used for expedited recovery of costs - recovered in riders

Cost trackers can challenge PBR because they weaken incentives to improve performance

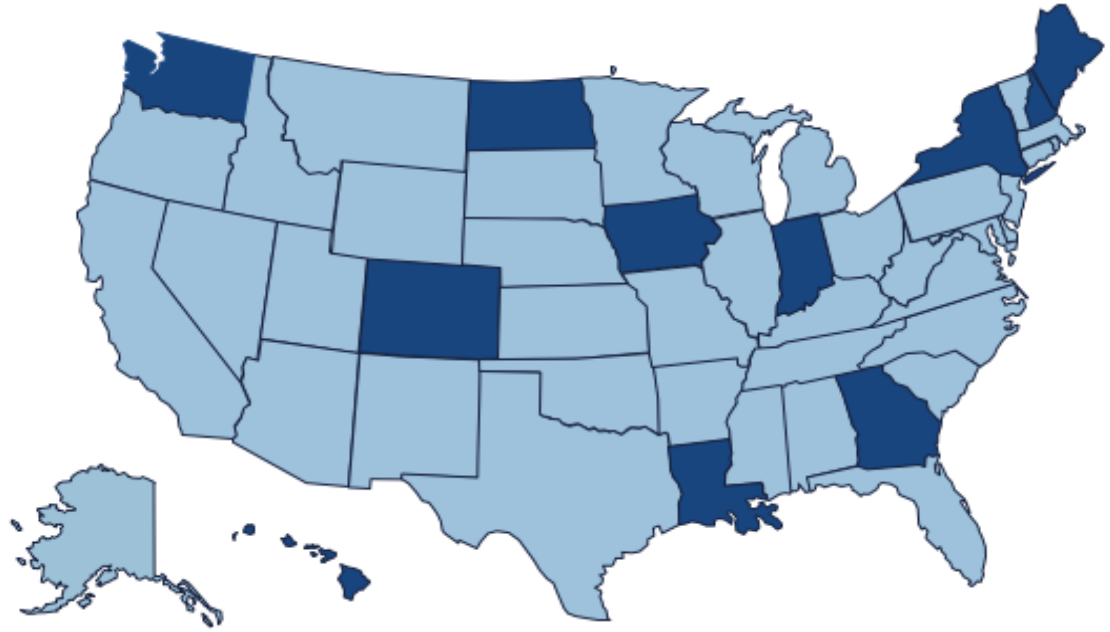
However, sometimes still used in conjunction with MYRPs to allow for recovery of costs that are difficult to control, and that are hard for the ARM to address

For example, CapEx trackers may be used to compensate to address for annual costs that capex can create, and which are hard to address with an ARM

Earnings Sharing Mechanisms share surplus/deficit earnings between utilities and their customers to mitigate upside and downside risk

- An Earnings Sharing Mechanism (ESM) can provide both “upside” and “downside” sharing of earnings between the utility and customers.
- This results when the rate of return on equity (ROE) deviates significantly from a public utility commission-approved target.
- ESMs often have “deadbands” (neutral zones around the target) in which earnings variances are not shared with customers.
- Some argue that ESMs may mitigate utility cost containment incentives.

States with Earnings Sharing Mechanisms (2015)

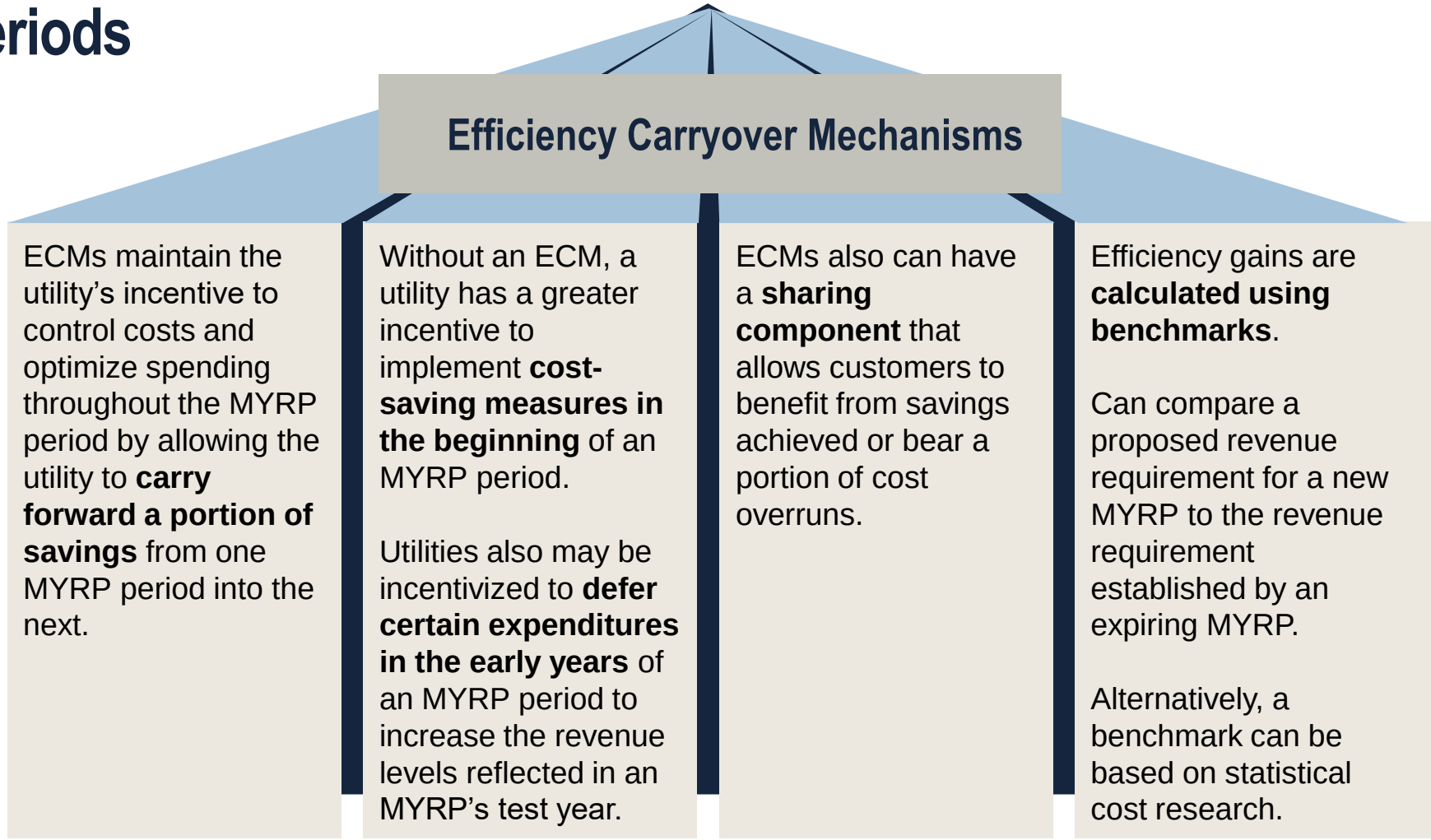


- Of these 11 states, 10 include asymmetrical provisions for sharing earnings in excess of the authorized ROE level (i.e., above the deadband), but not below the authorized ROE.

*Mark Newton Lowry et al., “Alternative Regulation for Emerging Utility Challenges: 2015 Update,” Pacific Economics Group for the Edison Electric Institute (EEI), November 11, 2015;

graphics: RAP & RMI.

Efficiency Carryover Mechanisms (ECMs) allow utilities to benefit from efficiency gains throughout and across MYRP periods



Graphics credit: RAP & Rocky Mountain Institute (RMI)

About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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Resources

- Next-Generation Performance-Based Regulation: Volume 1 (Introduction—Global Lessons for Success)
- Next-Generation Performance-Based Regulation: Volume 2 (Primer—Essential Elements of Design and Implementation)
- Next-Generation Performance-Based Regulation: Volume 3 (Innovative Examples from Around the World)
- Performance Incentives for Cost-Effective Distribution System Investments
- Protecting Customers from Utility Information System and Technology Failures
- Metrics to Measure the Effectiveness of Electric Vehicle Grid Integration

Jamie Barber
Georgia PSC Staff

Georgia Public Service Commission's

Experience with MYRPs

Jamie Barber

Energy Efficiency and Renewable Energy Manager

NARUC PBRSWG – June 3, 2020

Background

- First Multi Year Rate Plan (MYRP) filed in 1991 for Georgia Power Company (GPC)
- Also known as Alternate Rate Plan or Earnings Sharing
- MYRPs have been filed in 1996, 1998, 2001, 2004, 2007, 2010, 2013, and 2019
- 2016 Rate Case was delayed as part of a merger settlement between Southern Company (Georgia Power) and AGL Resources
- Earnings Dead Band established in 1998 with 2/3 excess earning refunded to customers and the remainder retained by the Company. The sharing percentages were changed in the 2019 GPC Rate Case
- Annual Surveillance Report (ASR) must be filed each year by March 15 and the Georgia Commission issues an Order including any ROE adjustments within one year

Rate Case	Target ROE	Earnings Band	Sharing %	Sharing Details
1998	12.25%	10% – 12.5%	66.67 / 33.33	First $50 million to Regulatory Assets
2001	12.5%	10% – 12.95%	66.67 / 33.33	Customers refund 2/3, GPC retains 1/3
2004	11.25%	10.25% – 12.25%	66.67 / 33.33	Customers refund 2/3, GPC retains 1/3
2010	11.15%	10.25% – 12.25%	66.67 / 33.33	Customers refund 2/3, GPC retains 1/3
2013	10.95%	10% – 12%	66.67 / 33.33	Customers refund 2/3, GPC retains 1/3
2019	10.5%	9.5% - 12%	80/20	40% Regulatory Assets, 40% Customers, 20% GPC

Earnings and Adjustments Summary

Examples of Staff Adjustments to Reported Earnings

2011-2013: Exclusion of Stock Options Expense and Stock Based Compensation Expense

2014: Electric Vehicle (EV) Pilot expenses were partially disallowed

2015: Reclassification of Plant Held For Future Use (PHFFU) to Non-Utility Property, New nuclear costs, EV Pilot expense adjustment

2016: Removal of PHFFU asset, Long-term deferral of regulatory assets, FERC reporting error

2017: Seven issues including PHFFU, EV Pilot, sale of property

2018: Minor accounting changes

Year	Filed ROE	Adjusted ROE	Excess Earnings
2011	11.72%	11.72%	None
2012	11.99%	12.14%	None
2013	11.44%	11.56%	None
2014	12.12%	12.14%	$11.3 million
2015	11.52%	11.55%	None
2016	12.46%	12.49%	$43.6 million
2017	11.91%	12.04%	$3.5 million
2018	13.17%	13.18%	$154.44 million
2019	12.88%	Pending	$123.2 million

2018 ASR RESULTS

- Filed by the Company March 15, 2019
- 2018 ASR was approved by the Commission on March 20, 2020
- Adjusted ROE of 13.18% resulted in excess earnings of $154.44 million
  - Settlement adjusted amount upward by $1.34 million
- Customer portion of overearnings was $102.96 million
  - 50% was used to reduce regulatory assets
  - Remaining $51.48 million was refunded to customers
- GPC retained $51.48 million

2019 Georgia Power Rate Case

- Rates were set using a ROE of 10.5%; Capital structure of 56% equity and 44% long term debt
- Beginning January 1, 2020, the earnings band shall be set at 9.5% to 12.0% ROE.
- The Company will not file a general rate case unless its calendar year retail earnings are projected to be less than 9.5% ROE
- Excess earnings in 2018 and 2019 will be used to pay down Regulatory Assets
  - 2018: Storm Damage
  - 2019: Early retirement of Regulatory Asset – Stewart County plant investigation
- Excess earnings in future cases (2020-2022)
  - 40% refunded directly to customers
  - 40% applied to Regulatory Assets prioritizing Accumulated Coal Combustion Residuals, Retired Generating Plant, Obsolete Inventory, Environmental Remediation, and Storm Damage
  - 20% retained by Georgia Power
- ASR to be filed by March 15 the following year
  - Commission review and adjustments complete by July 31 of same year
- Interim Cost Recovery mechanism which was approved in the 2010 Rate Case is continued throughout the term of the MYRP

Next Steps – 2022 Rate Case

- By July 1, 2022, the Company shall file testimony and exhibits required in a general rate case along with supporting schedules required by the Commission to support a “traditional” rate case
- The test period utilized by the Company in its rate case filing shall be from August 1, 2022 to July 31, 2023
- **The Company may propose to continue, modify or discontinue this Alternate Rate Plan**
- The Company shall also file projected revenue requirements for calendar years 2023, 2024, and 2025

Amy Andrews
Washington UTC Staff

UTC
Washington Utilities and Transportation Commission

Washington State Experience with Multi Year Rate Plans

Amy Andrews
Policy Director

NARUC PBRSWG - June 3, 2020

Example 1: “Simple” Two-year rate plan

- Approved end-of-period (EOP) rate base treatment.
- Allowed for a cost of service, rate spread, rate design collaborative if consensus reached before second year rates in effect.
- Provided additional low-income bill assistance funding.

Two-year rate plan (con’t)

- No escalation factors or efficiency requirements for year two.
- Cost drivers: discrete capital projects projected to be in service when year two rates took effect.
- Required attestation and supporting documents for actual booked expenditures for discrete projects identified *prior* to second year of rates.

Example 2: “Novel” MYRP

- Filed in 2013 as an Expedited Rate Filing (ERF).
  - Break the pattern of continuous rate cases.
  - Began as three-year rate plan working with the implementation of a full decoupling mechanism.
  - Extended rate plan one more year through another ERF proceeding.
  - Incentivized utility to become more efficient and cut costs.
  - Consumer protections: earning sharing mechanism and additional low-income funding.
  - Capped annual rate increases at 3% for electric and 2.2% for gas.

“Novel” MYRP (con’t)

- Use of escalation factors (similar to a K-factor):
  - **Fixed annual increases in delivery costs**
    - Based on factors set at a level below recent historical increases in operational expenses (incentive to operate efficiently).
  - **Weighted average based on the percentage of non-production related revenue requirement for**:
    - Non-production rate base
    - Depreciation expense
    - All other O&M
  - **Approved factors were set at 3% for electric and 2.2% for natural gas**
    - 5 years of historical data indicated increases of 4.06% for electric and 3.80% for gas.
      - Based on projected CPI less 0.5% productivity factor.

“Novel” MYRP (con’t)

- Other components:
  - No adjustments to the capital structure or ROE during plan.
  - Earnings sharing mechanism:
    - Earnings > 25 basis points above authorized ROR required a 50/50 sharing with customers.
  - Low income consideration:
    - Proportional increase to LI funding with residential bill impacts for each plan year.

Looking forward

- Economic challenges from COVID-19 pandemic
- Clean Energy Transformation Act Implementation
  - Requires a four-year investment plan.
- 2019 clarification/broadening of authority to use more flexible regulatory tools including MYRP:
  - Allows capital investments up to 48 months after rate effective date for inclusion in rates.

Q&A
Discussion