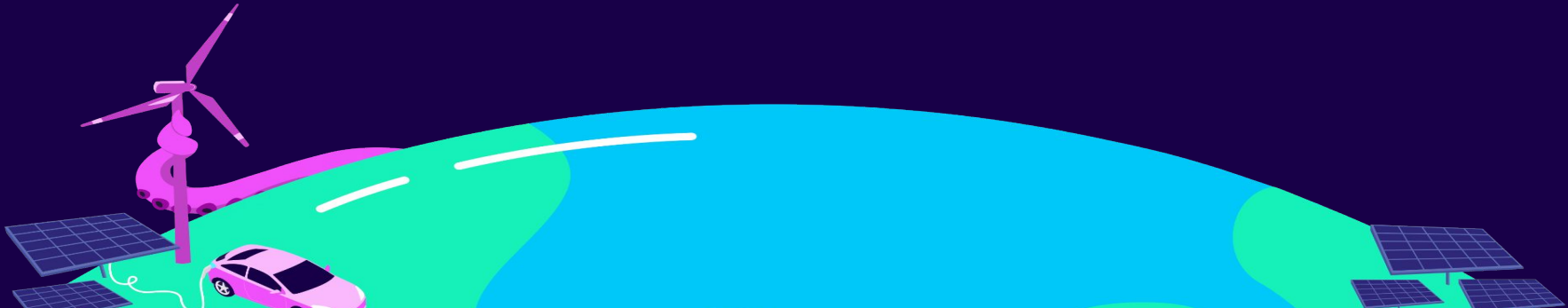




**KRAKEN**

# Leveraging Cloud Technologies Through Efficient Regulation

## PBR State Working Group Presentation





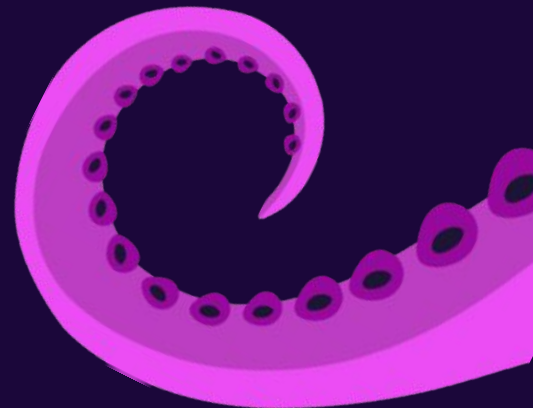
**Rajiv Shah**

Head of North American Policy  
and Markets



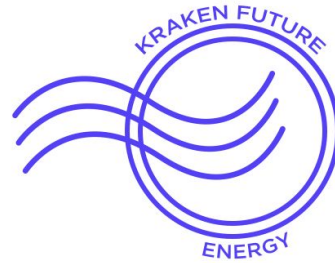
**Rachel Fletcher**

Global Director of Regulation  
and Economics

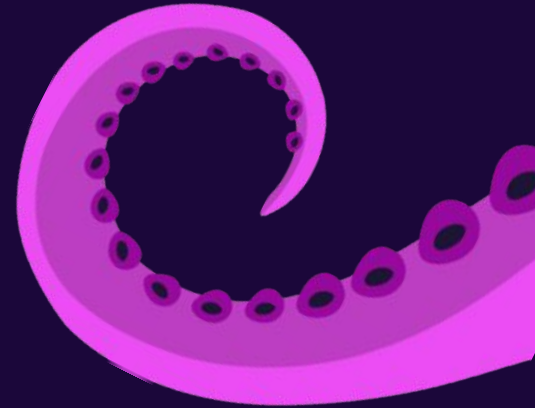


# Agenda

- Intro to Kraken
- UK PBR case study
- Applying UK principles to IT investments in the US
- Q&A



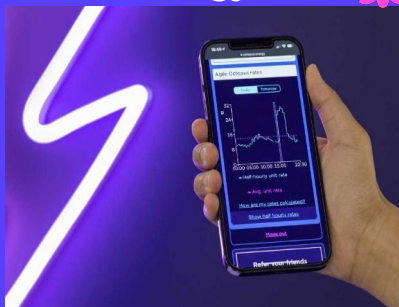
# Intro to Kraken



# One of the many **Octopus Energy** tentacles

## Octopus Energy

### Retail Energy



- **8m+** customers
- **8** countries
- **#1** for customer service
- **World-leading** consumer flex - 600MW and 85k+ devices

### Services



- **EV** leasing
- **Heat pump** tech & installations
- **Solar** and **meter** installations
- **Electroverse EV charging** network

### Generation



- **\$7bn** generation assets managed
- **14** countries
- Fan Club community generation

## Kraken

### Tech Licensing



- **18 countries**
- **50m+** contracted accounts
- **40+ migrations** from 17 platforms
- KrakenFlex: **6GW** contracted

# Single, end-to-end platform for utilities

## CUSTOMER

CIS & Billing  
Meter Data Management  
Customer Relationship  
Management (CRM)  
Customer Interaction



## FLEX

Asset Management & Control  
Real-time Alerting  
Asset & Portfolio Optimization  
Asset Reporting & Analytics

## FIELD SERVICES

Job & Workforce Management  
Material Management  
In-field App  
Customer Service & After Care

## Utilities supported



Electricity



Gas



Water



Wastewater



Fiber

# Kraken is proven tech

50<sub>million+</sub>

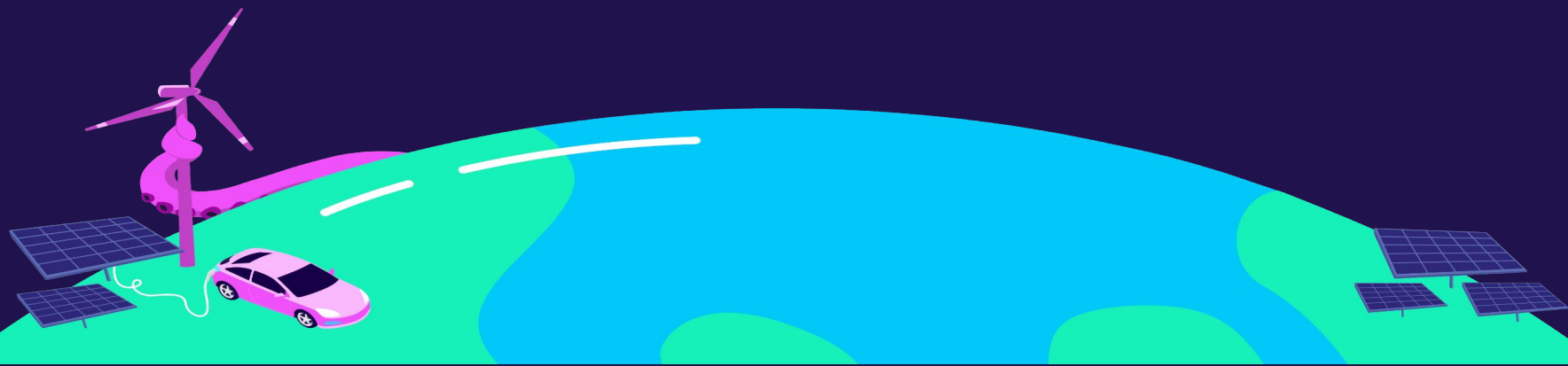
Customers globally including US

40+

Successful migrations

100<sub>s</sub>

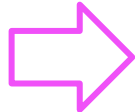
Daily deployments



# Kraken Ethos and Outcomes

## The approach

1. Supercharge the tech stack
2. Migrate to the future fearlessly
3. Serve the new energy customer



## The outcomes

Reduced O&M spending

Happier customers and team

De-risked migration

More nimble organization

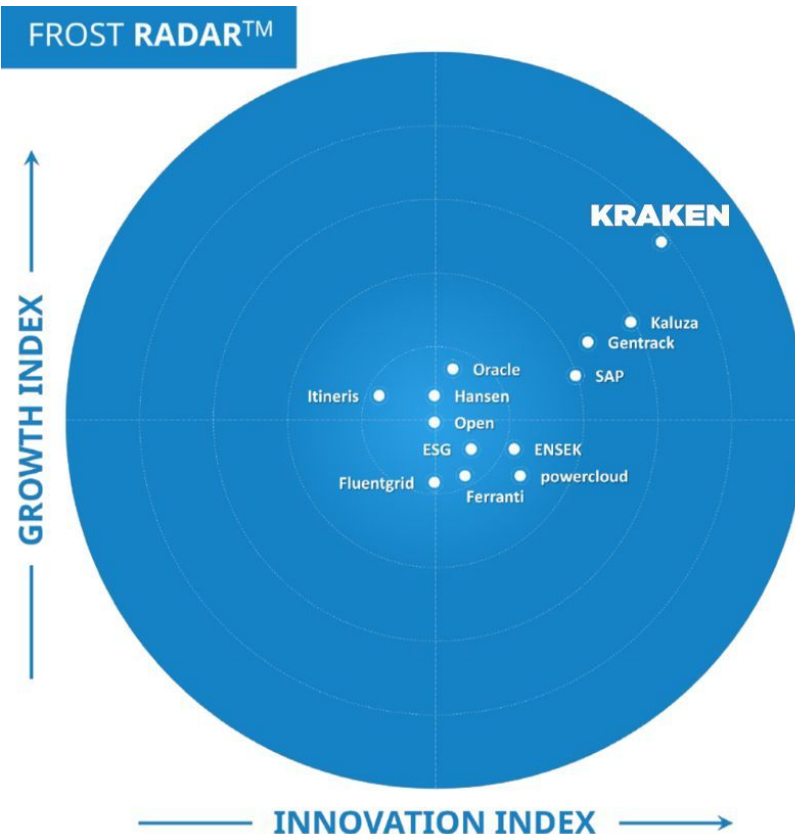
Increased demand flexibility





# “Kraken is the market leader”

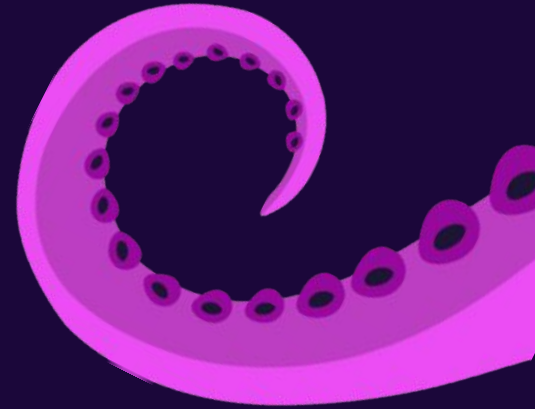
– Frost & Sullivan





Source: Frost & Sullivan: Digital Platforms for Electric Utility and Energy Retail Customer Care and Engagement, 2023



# UK PBR Case Study



# Background: key UK regulators

Entity	Role	Utility Structure
	Responsible for economic regulation of the privatised water and sewerage industry	Vertically integrated; similar to many IoUs in US-market context
	Responsible for protecting the interests of energy consumers, where possible by promoting competition	Exclusively T&D, with competitive retail operations and deregulated wholesale market; similar to Texas in US-market context



# UK water case study:

## Severn Trent Water + Kraken licensing deal



Severn Trent Water (SVT Water) supplies 4.6 million households and business across the Midlands and Wales.



SVT Water signed with Kraken in the middle of its “price control review” process which sets allowed revenues for the 5 year period beginning in April 2025.

Critically, the SVT Water + Kraken deal required no regulatory approval



Q:

What in the regulatory regime made it possible for this deal to happen before ratemaking concluded and with no other form of regulatory approval?



# UK water case study:

## 3 key regulatory drivers

**1.**

Performance  
Incentive  
Mechanisms (PIMs)

**2.**

Totex Ratemaking  
(TR) Regime

**3.**

Predictable  
multi-year plans



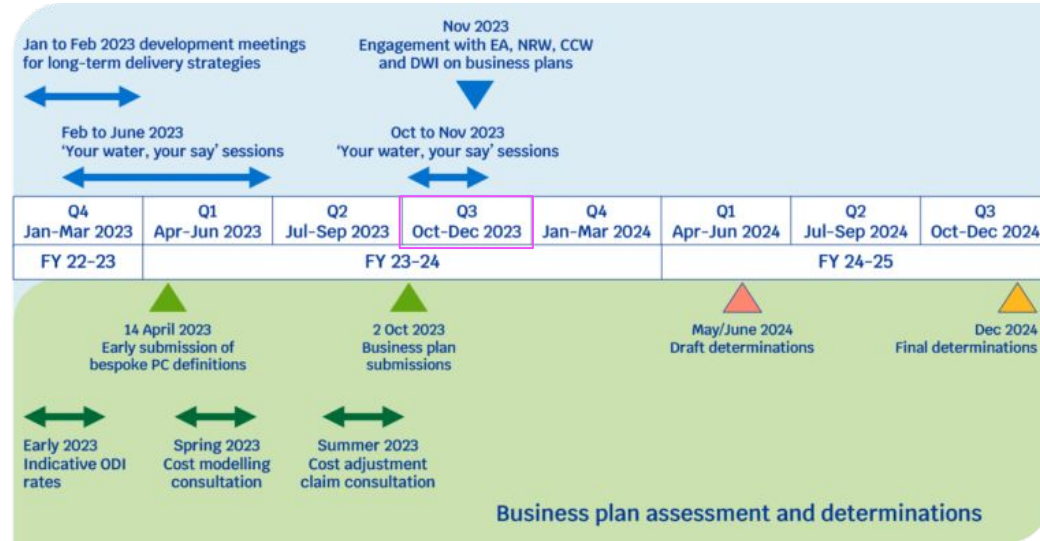
# Background: Ofwat “price control review” process sets revenues for 5-year period

## PR19

- The 2019 price review (PR19) set water companies service targets (‘performance commitments’) during 2020–25.
- Most of companies’ performance commitments have rewards and penalties (‘outcome delivery incentives (ODIs)’)) associated with them.
- The majority of these ODIs are financial.

## PR24

- Ofwat currently working on the 2024 price review (PR24), which set price controls for water and sewerage companies for 2025 to 2030.



## PR24 Key Milestones



# Reg Drivers: #1 Performance Incentive Mechanisms

## SVT 2022/2023 APR - Customer Service Metrics

- SVT files an Annual Performance Report
- Commitments include: C-Sat, Complaint Resolution, Supply Interruptions, Leaks and time to fix leaks, and pollution/sewer flooding incidents
- In 2023, SVT water met **79% of measures**, resulting in a net reward of **£27 million**.

Performance Commitment	Units	Performance Commitment Level	Performance Achieved	ODI Outperformance/ Underperformance (£m)
Reducing residential void properties	Number	167,716	134,818	5.231
Reducing residential gap sites	Number	688	637	Reputational
Reducing business void and gap site supply points	Number	50	3,242	0.670
Value for money	Percentage	63.5	64.4	Reputational
Inspiring our customers to use water wisely	Number	31,050	122,159	0.675
Customer measure of experience [C-MeX]	Rank	-	9th	0.000
Developer services measure of experience [D-MeX]	Rank	-	3rd	2.648
Help to pay when you need it	Percentage	42	52	Reputational
Priority services for customers in vulnerable circumstances	Percentage	7.3	7.7	Reputational

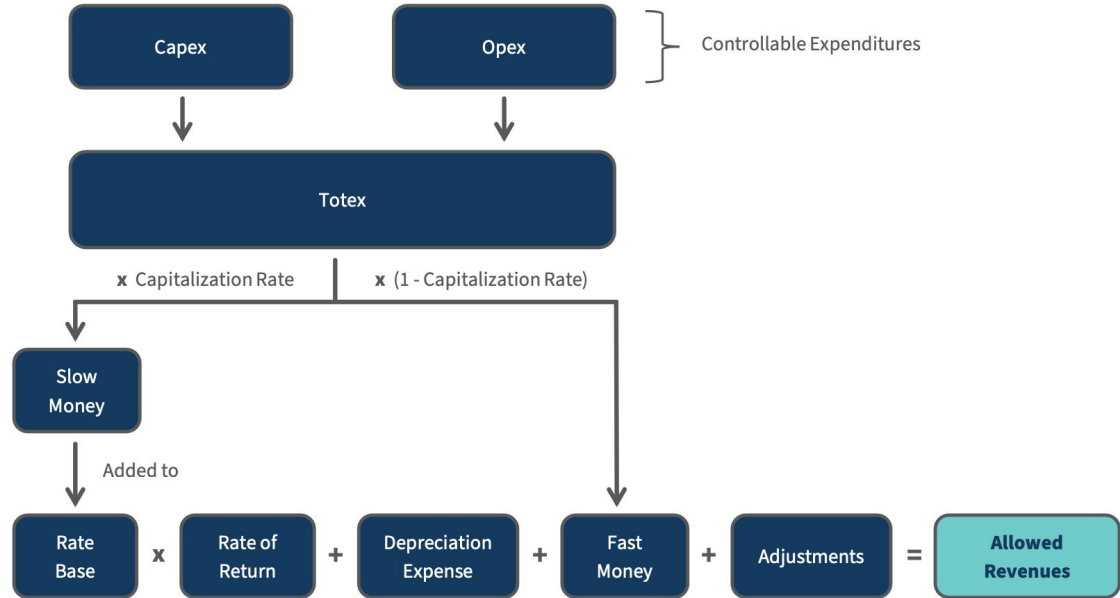
Source: [SVT Water 2022/2023 Annual Performance Report](#)



# Reg Drivers: #2 Totex Ratemaking (TR)

- TR Treats Capex and Opex equivalently for ratemaking purposes
- It is a core part of the UK's RIIO framework
- Water companies can retain ~50% of Totex efficiency savings
- Practical impact: no disincentive to solve an issue by making an operational expenditure (e.g., signing an annual lease agreement with a company like Kraken)

## Totex Ratemaking



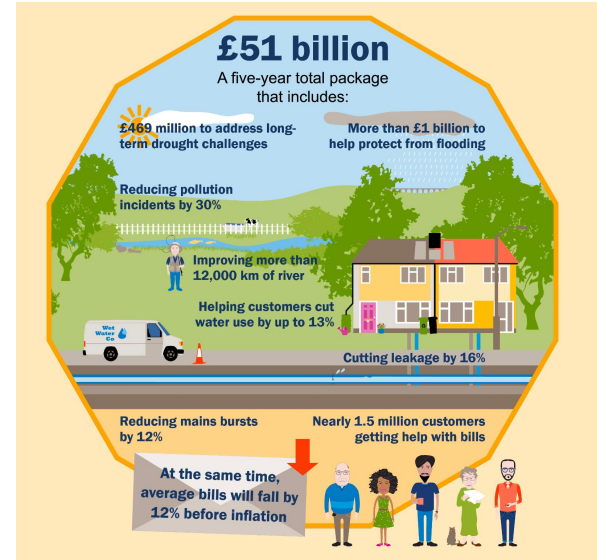
Source: RMI, [Making the Clean Energy Transition Affordable](#)





# Reg Drivers: #3 Predictable multi-year plans

- Precise measurement of performance outcomes (the ODIs) may differ from one 5-year period to the next, but the underlying motivations for water companies are clear:
  - Invest in solutions that drive operational efficiencies and improvements
  - Present regulators with ambitious and credible business plans that help set the benchmark for other companies (in other words: be ahead of the curve)
- During the PY19 cycle, companies that presented strong business plans were awarded with a higher efficiency sharing factor (i.e., they got to keep a higher percentage of their cost-savings)



## PR19 outcomes



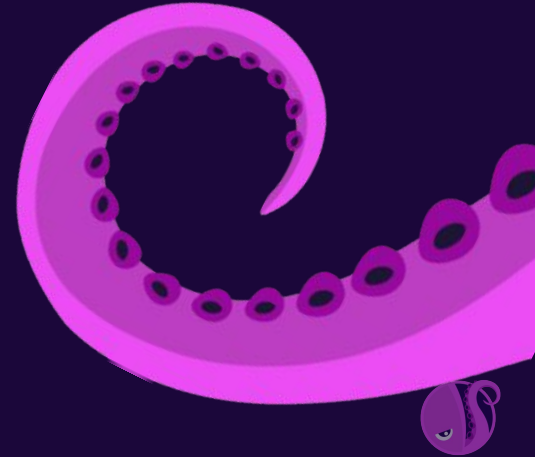
# UK water case study:

3 key reg drivers put focus on outcomes and incentivize prudent investment without testing a contract against a market price

Potential upsides of choosing Kraken	What if benefits don't materialize?
<ul style="list-style-type: none"><li>- Financial incentives for hitting ODIs</li><li>- Beat revenue allowance and retain % of efficiency savings</li><li>- Potentially higher efficiency factor for strong business plans</li></ul>	<ul style="list-style-type: none"><li>- Penalties for failure to hit ODIs</li><li>- Exceed revenue allowance, split costs between utility and customers</li><li>- Greater business plan scrutiny</li></ul>



# Applying UK principles to IT investment in the US



# US Pathway to Transformation



## **Status Quo**

Traditional CoS  
RoR only on CapEx  
No performance incentives

## **Fully Transformed Market**

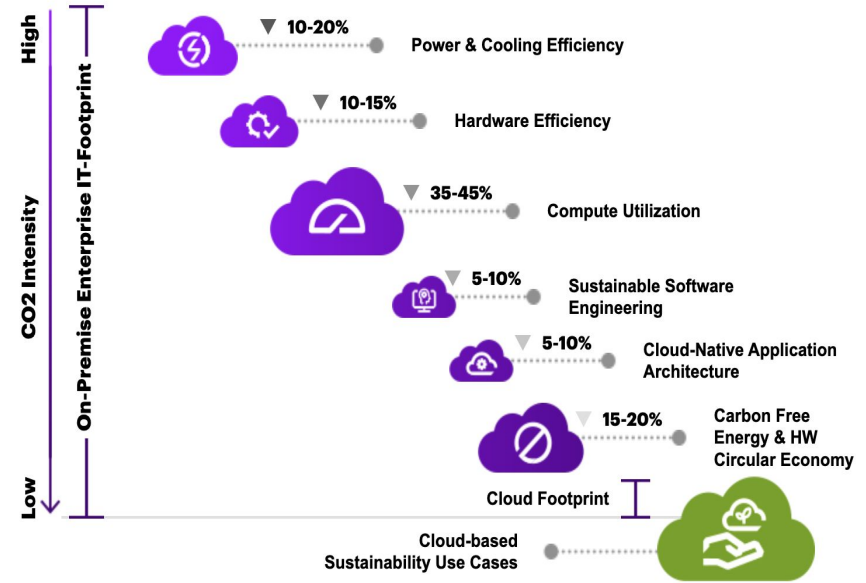
PIMs  
Totex w/rev cap  
Multi-year plans  
Revenue decoupling

**Q:**

Given that most state markets exist somewhere along the middle, what effect can these individual regulatory mechanisms have on utility IT decision making?

# Background: Cloud platforms can be more efficient, flexible and secure

- **Cost-effective** – open up capacity and resources to focus on core utility activities.
- **Agile** – rapid and scalable deployment enabling faster response to changing utility needs and regulatory requirements.
- **Secure** – cloud providers invest heavily in security, offering advanced security features and encryption. Adopted by defense and banking industries.
- **Forward-looking** – cloud services are better suited to connecting and managing DERs and the smart grid.



Source: Accenture - Green Behind the Cloud (2020)

# Background: Current CoS model disincentivizes cloud investments

1. Where SaaS solutions are cheaper, the utility is disincentivized from selecting them
2. Where SaaS solutions are the same price or more expensive, but with better functionality, need to reward better performance

Does GAAP Allow the Cost to Be Capitalized?

Cost Function	Solution Type		Before ASU 2018-15	After ASU 2018-15
Software	On-Premises	On-site software	Yes	Yes
	Cloud-Based	Internal-Use License	Yes	Yes
		Usable only with the vendor's cloud service	No	No
Software Implementation Costs	On-Premises	On-site software	Yes	Yes
	Cloud-Based	Internal-Use License	Yes	Yes
		Usable only with the vendor's cloud service	Diverse practice	Yes
Storage	On-Premises	Hardware	Yes	Yes
	Cloud-Based	Hosting	No	No
Computation	On-Premises	Hardware	Yes	Yes
	Cloud-Based	Hosting	No	No

Source: [AEU & EEI Whitepaper: Reaching for the Cloud](#), 2022



# Summary of Individual Actions and their Impact

Action	Goal	Limitations	LoC
SaaS Capitalization	Eliminate bias towards on-premise solutions; unlock ability for cloud providers to compete	Same incentive to spend more	
Shared Savings/ Modified Clawback	Incentivize cost-containment	Potential to sacrifice performance for savings incentive	
Performance Incentive Mechanism	Incentivize outcomes aligned with Commission and State goals	Must choose right PIMs – traditional customer serv/reliability/affordability metrics vs emerging decarb/equity/resilience goals  Need for proper baseline data	
Totex + Revenue Cap Regulation	Eliminate Capex bias and promote cost-containment	Without proper PIMs, potential to sacrifice performance for cost savings  Must have adequate mechanisms to respond to crises	

# At a minimum: open door for cloud-based providers; widen the pool of potential solutions

## Action

## Goal

## Limitations

SaaS Capitalization	Eliminate bias towards on-premise solutions; unlock ability for cloud providers to compete	Same incentive to spend more
Shared Savings/ Modified Clawback	Incentivize cost-containment	Potential to sacrifice performance for savings incentive
Performance Incentive Mechanism	Incentivize outcomes aligned with Commission and State goals	Must choose right PIMs - traditional customer serv/reliability/affordability metrics vs emerging decarb/equity/resilience goals  Need for proper baseline data
Totex + Revenue Cap Regulation	Eliminate CapEx bias and promote cost-containment	Without proper PIMs, potential to sacrifice performance for cost savings  Must have adequate mechanisms to respond to crises



# Better: incentivize more cost-effective and outcome-aligned solutions.

## Action

## Goal

## Limitations

SaaS Capitalization	Eliminate bias towards on-premise solutions; unlock ability for cloud providers to compete	Same incentive to spend more
Shared Savings/ Modified Clawback	Incentivize cost-containment	Potential to sacrifice performance for savings incentive
Performance Incentive Mechanism	Incentivize outcomes aligned with Commission and State goals	Must choose right PIMs – traditional customer serv/reliability/affordability metrics vs emerging decarb/equity/resilience goals.  Need for proper baseline data
Totex + Revenue Cap Regulation	Eliminate Capex bias and promote cost-containment	Without proper PIMs, potential to sacrifice performance for cost savings  Must have adequate mechanisms to respond to crises

# Even better: eliminate Capex bias and align towards cost-effective outcomes

## Action

## Goal

## Limitations

SaaS Capitalization	Eliminate bias towards on-premise solutions; unlock ability for cloud providers to compete	Same incentive to spend more
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Q&A