The background of the slide is a photograph of a modern glass skyscraper, viewed from a low angle looking up. The building's facade is composed of a grid of dark metal frames and large glass panels. The sky is a clear, pale blue. In the top left corner, the text 'MOODY'S INVESTORS SERVICE' is displayed in a dark blue, serif font. A solid blue horizontal band spans the width of the slide, containing the main title in white, sans-serif font. In the bottom right corner, the date 'September 2018' is written in a smaller, white, sans-serif font.

MOODY'S
INVESTORS SERVICE

Performance Based Ratemaking Rating Agency Perspective

September 2018

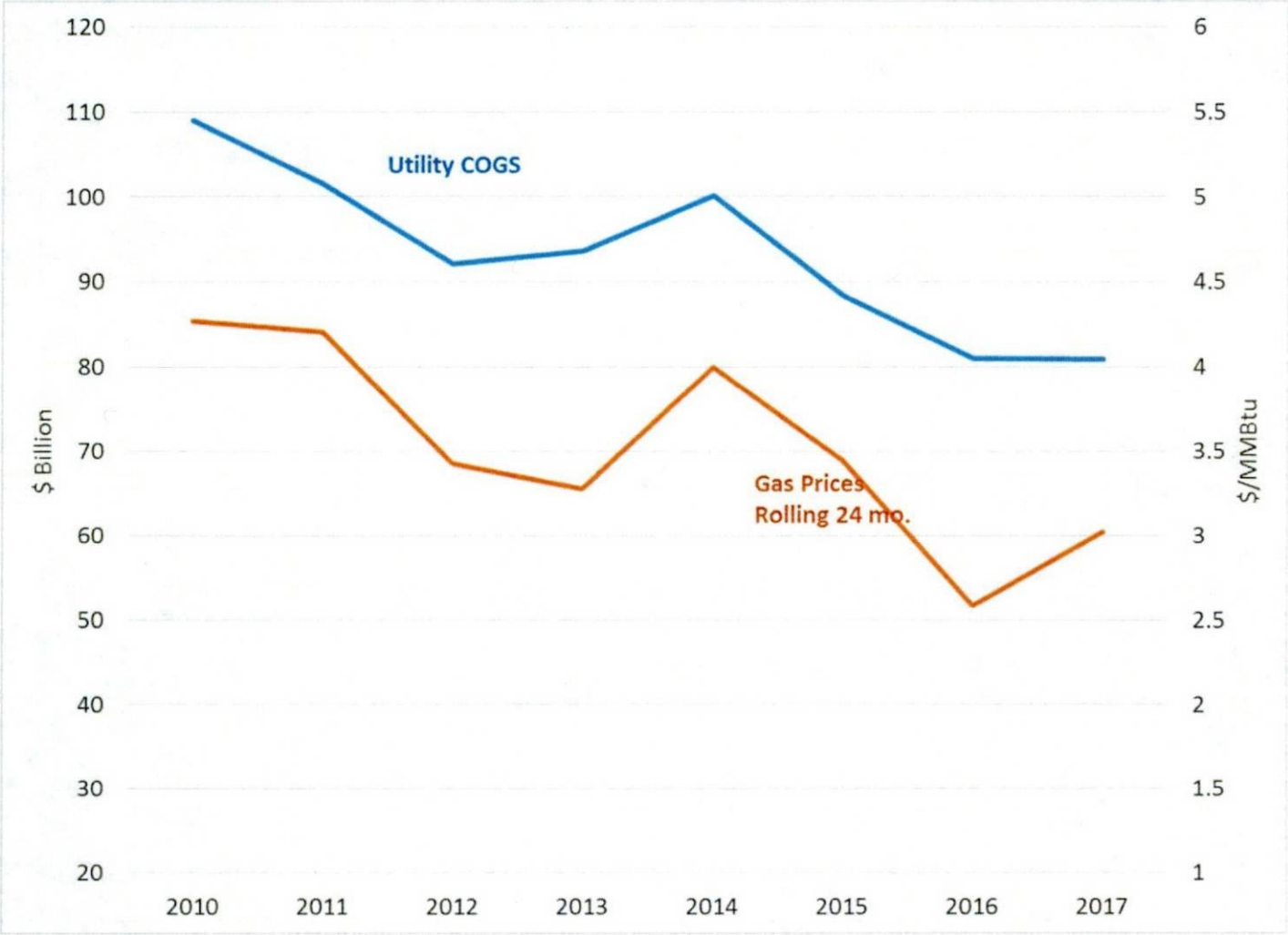
Cost of Service Regulation Leads Utilities Down the Wrong Path

- Spend money to make money.
 - High cost structure lowers the hurdle for competing technologies.
- Incentivized against non-capital projects
 - Demand management and distributed energy resources are strong emerging technologies but they are not capital intensive.
 - PPAs and other outsourcings are also not capital intensive.
- Moral hazard of trackers and construction pre-approvals.

Falling Commodity Prices Allowed for Robust Rate Base Growth

Revenue Breakdown	CAGR 2010 - 2016
Commodity	-5.0%
Operating	2.5%
Capital	4.0%
Total revenue	0%

Commodity Costs Declined with Gas



UK's RIIO Regulation A Step Forward

- Well beyond trackers and riders
- Win-win-win: cost, performance and profitability

The UK's RIIO -- (Revenue = Incentives + Innovation + Outputs)

- Multi-year rate plan – rate case moratorium for 8 years
- TOTEX – indifferent on operating v capital expenditures
- Strong performance and cost incentive mechanisms

PBR v. Credit

- PBR correlates with higher credit quality
- Trackers and riders and forward test year viewed positively
 - Hawaii appears to have extensive recovery mechanisms but still significant regulatory lag
- RIIO regulatory framework scored higher than US's trackers and riders
- NY's REV had little effects after much publicity
 - Small initiatives increase administrative burden and produce little result