Committee on Water

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Ratemaking and Cloud Computing

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Regulatory Accounting for Cloud Computing Costs

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Disclaimer

The opinions expressed in this presentation are my personal opinions, they do not necessarily reflect the opinions of the
Washington Utilities and Transportation Commission, its commissioners or other staff members.

Costs of Cloud Services

Migration Costs

Operating Costs

Migration Costs

Cloud Services

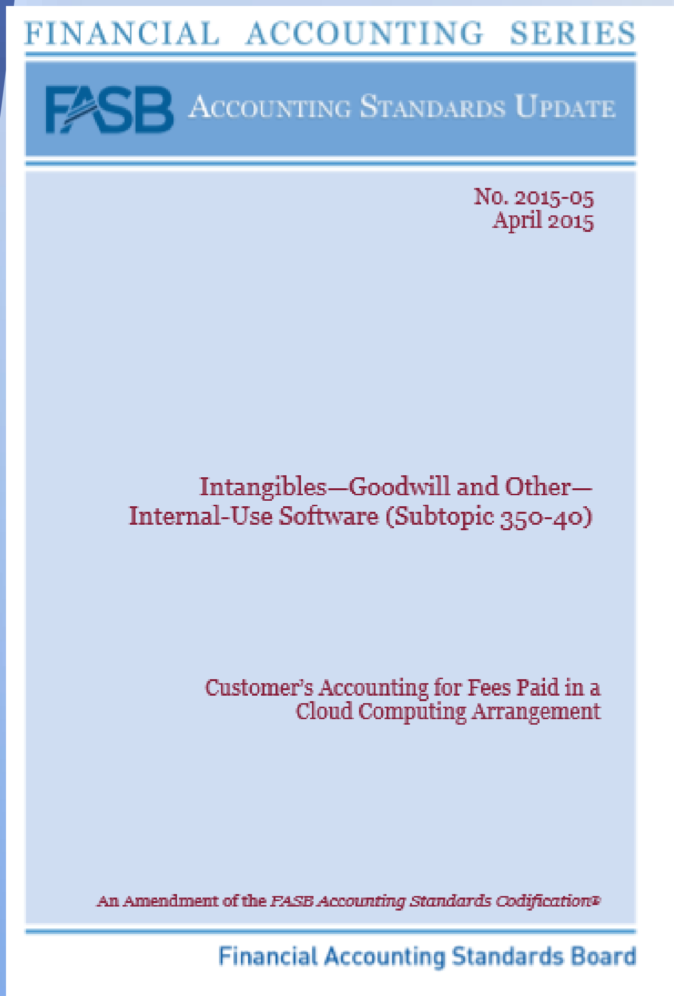
Migration Costs

The cost of migrating from an on-premise IT solution to a cloud based solution.

- Data conversion,
- Data Re-engineering,
- Storage,
- Retraining,
- Remodeling,
- Stranded Costs.

Migration Costs

Issue: The inability under GAAP for companies to capitalize the costs of migration to cloud services rather, the costs must be expensed as incurred.



FINANCIAL ACCOUNTING SERIES

FASB ACCOUNTING STANDARDS UPDATE

No. 2015-05
April 2015

Intangibles—Goodwill and Other—
Internal-Use Software (Subtopic 350-40)

Customer's Accounting for Fees Paid in a
Cloud Computing Arrangement

An Amendment of the *FASB Accounting Standards Codification®*

Financial Accounting Standards Board

GAAP

Accounting Standards Update 2015-05 does not allow the capitalization of cloud migration costs unless, some form of ownership exists.

350 Intangibles—Goodwill and Other
40 Internal-Use Software
15 Scope and Scope Exceptions

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GAAP

Accounting Standards 350-40

Capitalize the costs of hosted services only if:

1. Customer has right to take possession with out significant penalty *and*
2. It is feasible to either run the software on company hardware or contract with another party unrelated to vendor to host software. *(paraphrased)*

Re

effects of

Financial Accounting

ORIGIN

980 Regulated Operations
340 Other Assets and Deferred Costs
25 Recognition

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Collapse | Expand

General Note: The Recognition Section provides guidance on the required criteria, timing, and location (within the financial statements) for recording a particular item in the financial statements. Disclosure is not recognition.

25-1 Rate actions of a regulator can provide reasonable assurance of the existence of an asset. An entity shall capitalize all or part of an incurred cost that would otherwise be charged to expense if both of the following criteria are met:

...nt of Financ >> Recognition of Regulatory Assets

a. It is probable (as defined in Topic 450) that future revenue in an amount at least equal to the capitalized cost will result from inclusion of that cost in allowable costs for rate-making purposes.

b. Based on available evidence, the future revenue will be provided to permit recovery of the previously incurred cost rather than to provide for expected levels of similar future costs. If the revenue will be provided through an automatic rate-adjustment clause, this criterion requires that the regulator's intent clearly be to permit recovery of the previously incurred cost.

Migration Costs

Conclusion: The cost of migrating from an “on-premise” IT solution to a cloud based solution <u>may be</u> capitalized for later recover if allowed by the commission.

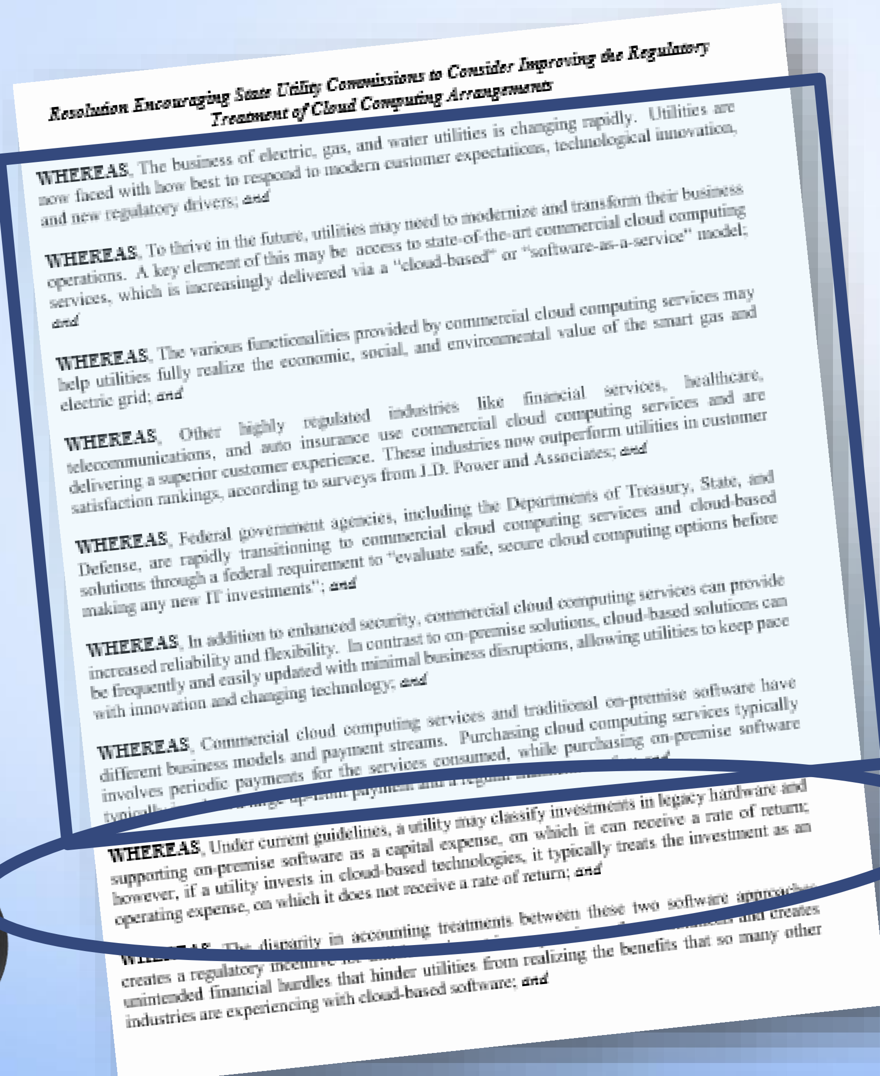
Operating Costs

The cost associated with the operation the cloud service normally measured on an annual basis.

- Annual fees
- Fees and charges measured by:
  - Processor time usage,
  - Storage usage,
  - Capacity,
  - Other system Demands.

Operating Costs

Issue: The inability of a company to earn a return on the cloud services expense.



Resolution Encouraging State Utility Commissions to Consider Improving the Regulatory Treatment of Cloud Computing Arrangements

WHEREAS, The business of electric, gas, and water utilities is changing rapidly. Utilities are now faced with how best to respond to modern customer expectations, technological innovation, and new regulatory drivers; *and*

WHEREAS, To thrive in the future, utilities may need to modernize and transform their business operations. A key element of this may be access to state-of-the-art commercial cloud computing services, which is increasingly delivered via a "cloud-based" or "software-as-a-service" model; *and*

WHEREAS, The various functionalities provided by commercial cloud computing services may help utilities fully realize the economic, social, and environmental value of the smart gas and electric grid; *and*

WHEREAS, Other highly regulated industries like financial services, healthcare, telecommunications, and auto insurance use commercial cloud computing services and are delivering a superior customer experience. These industries now outperform utilities in customer satisfaction rankings, according to surveys from J.D. Power and Associates; *and*

WHEREAS, Federal government agencies, including the Departments of Treasury, State, and Defense, are rapidly transitioning to commercial cloud computing services and cloud-based solutions through a federal requirement to "evaluate safe, secure cloud computing options before making any new IT investments"; *and*

WHEREAS, In addition to enhanced security, commercial cloud computing services can provide increased reliability and flexibility. In contrast to on-premise solutions, cloud-based solutions can be frequently and easily updated with minimal business disruptions, allowing utilities to keep pace with innovation and changing technology; *and*

WHEREAS, Commercial cloud computing services and traditional on-premise software have different business models and payment streams. Purchasing cloud computing services typically involves periodic payments for the services consumed, while purchasing on-premise software typically [illegible] large up-front payment and a regular [illegible]; *and*

WHEREAS, Under current guidelines, a utility may classify investments in legacy hardware and supporting on-premise software as a capital expense, on which it can receive a rate of return; however, if a utility invests in cloud-based technologies, it typically treats the investment as an operating expense, on which it does not receive a rate of return; *and*

WHEREAS, The disparity in accounting treatments between these two software approaches creates a regulatory incentive for [illegible] and creates unintended financial hurdles that hinder utilities from realizing the benefits that so many other industries are experiencing with cloud-based software; *and*

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- Investments in Legacy on-premise Hardware and Software, classified as capital expenditures, do receive a rate of return.
- Investments in Cloud Services classified, as operating expenses, do not receive a rate of return.
- Therefore there is a disincentive to invest in cloud based services.

Investments in Cloud Services classified as operating expenses do not receive a rate of return.

- Investments are never classified as expenses,
- Expenses never receive a rate of return,
- Working capital does receive a rate of return

Investments in working capital that fund costs associated with Cloud Services do receive a rate of return.

Definition of Working Capital

Working Capital is:

"…the average amount of capital provided by investors, over and above the investment in plant and other specifically measured rate base items, to bridge the gap between the time expenditures are required to provide services and the time collections are received for such services."

Accounting for Public Utilities
Hahne & Aliff 12/2015

Common Regulatory Rate Base (avg or year end)

	RATE BASE	
	PLANT IN SERVICE	
31	Intangible	$156,057
32	Production	832,833
33	Transmission	430,613
34	Distribution	970,455
35	General	233,266
36	Total Plant in Service	2,623,224
	ACCUMULATED DEPRECIATION/AMORT	
37	Intangible	(30,914)
38	Production	(351,625)
39	Transmission	(135,624)
40	Distribution	(295,383)
41	General	(80,093)
42	Total Accumulated Depreciation	(893,639)
43	NET PLANT	1,729,585
44	DEFERRED TAXES	(354,706)
45	Net Plant After DFIT	1,374,879
46	DEFERRED DEBITS AND CREDITS	4,567
47	WORKING CAPITAL	65,480
48	TOTAL RATE BASE	1,444,926

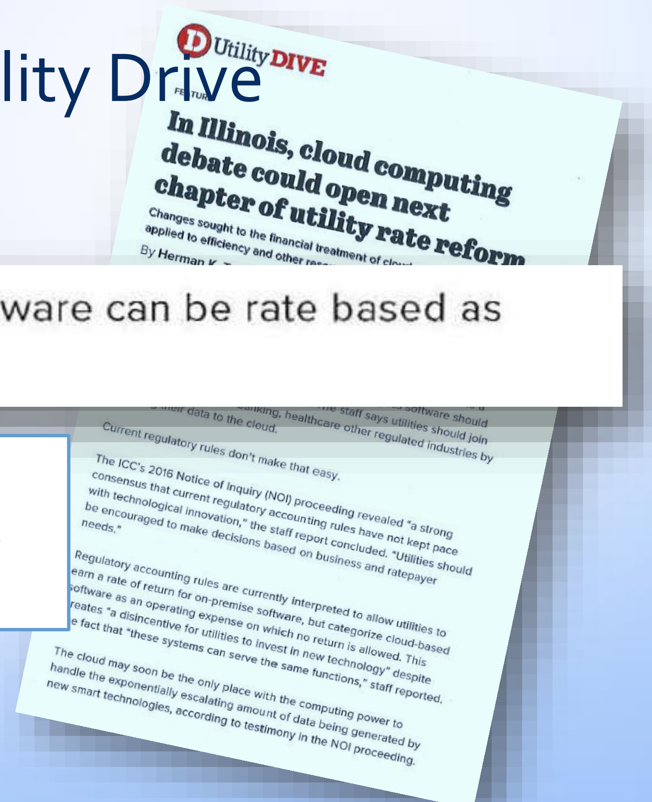
Operating Costs

Conclusion: Companies do earn a return on their investments in cloud services through working capital.

To artificially capitalize an expense would introduce double recovery on investment.

Clarification of UtilityDrive Comments

Clarification of Utility Drive Comments



Utility DIVE

In Illinois, cloud computing debate could open next chapter of utility rate reform

Current regulatory rules don't make that easy.

The ICC's 2016 Notice of Inquiry (NOI) proceeding revealed "a strong consensus that current regulatory accounting rules have not kept pace with technological innovation," the staff report concluded. "Utilities should be encouraged to make decisions based on business and ratepayer needs."

Regulatory accounting rules are currently interpreted to allow utilities to earn a rate of return for on-premise software, but categorize cloud-based software as an operating expense on which no return is allowed. This creates "a disincentive for utilities to invest in new technology" despite the fact that "these systems can serve the same functions," staff reported.

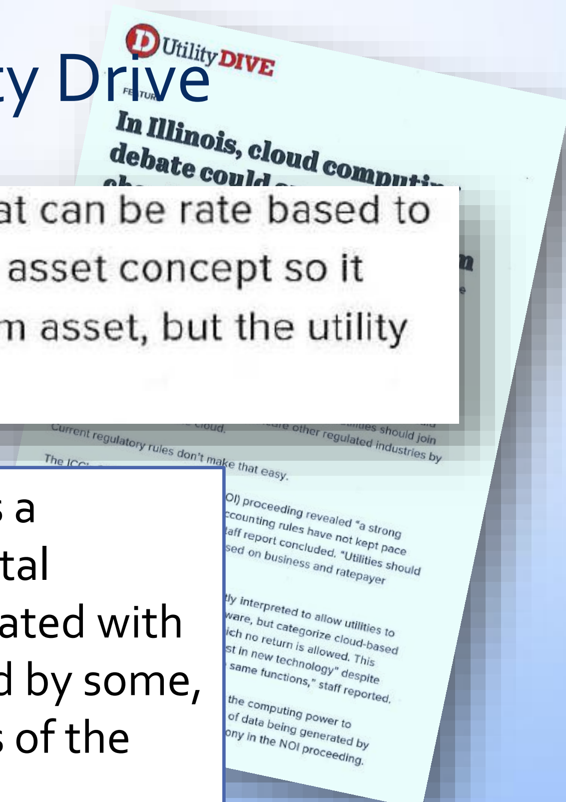
The cloud may soon be the only place with the computing power to handle the exponentially escalating amount of data being generated by new smart technologies, according to testimony in the NOI proceeding.

The monthly charge for cloud-based software can be rate based as "working capital," Kermode added.

<u>The company's investment funding the</u> monthly charge for cloud-based services should be rate based in working capital.

Clarification of Utility Drive Comments

"All companies have a working capital provision that can be rate based to fund current obligations," he said. "It is a long-term asset concept so it doesn't exactly fit if it is used to finance a short-term asset, but the utility gets a return on it."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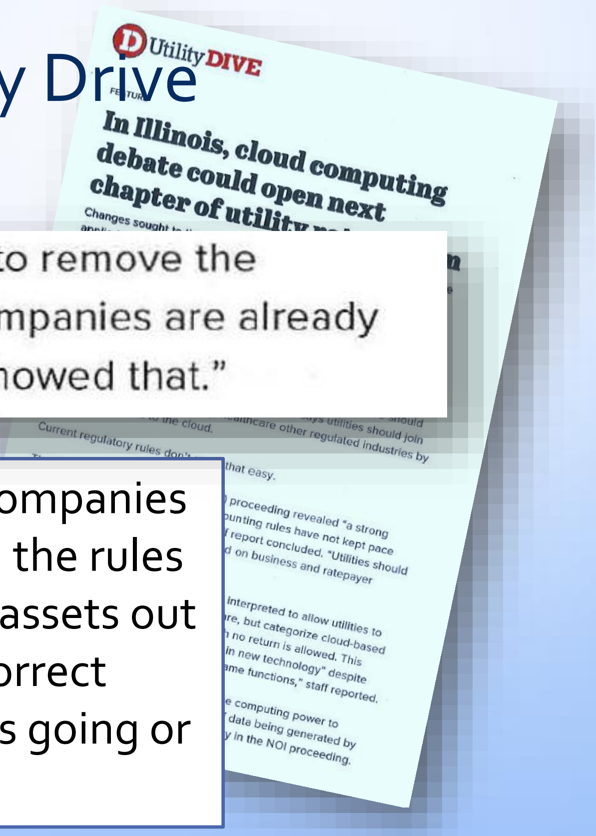
Included in each regulated company's rate base is a working capital component. It is the working capital component which includes the investment associated with cloud services. A capitalized expense, as proposed by some, is inconsistent with the short-term characteristics of the cloud computing business model.

Clarification of Utility Drive Comments



Kermode opposes changing the accounting rules to remove the disincentive to cloud-based software because "companies are already going to the cloud," he said. "The Oracle survey showed that."

I do not oppose changing the rules just because companies are going to the cloud anyway. I oppose changing the rules because the change suggests creating long-term assets out of a short term operating costs; that is simply incorrect accounting, GAAP or regulatory basis. Companies going or not going to the cloud is irrelevant.

Questions?

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