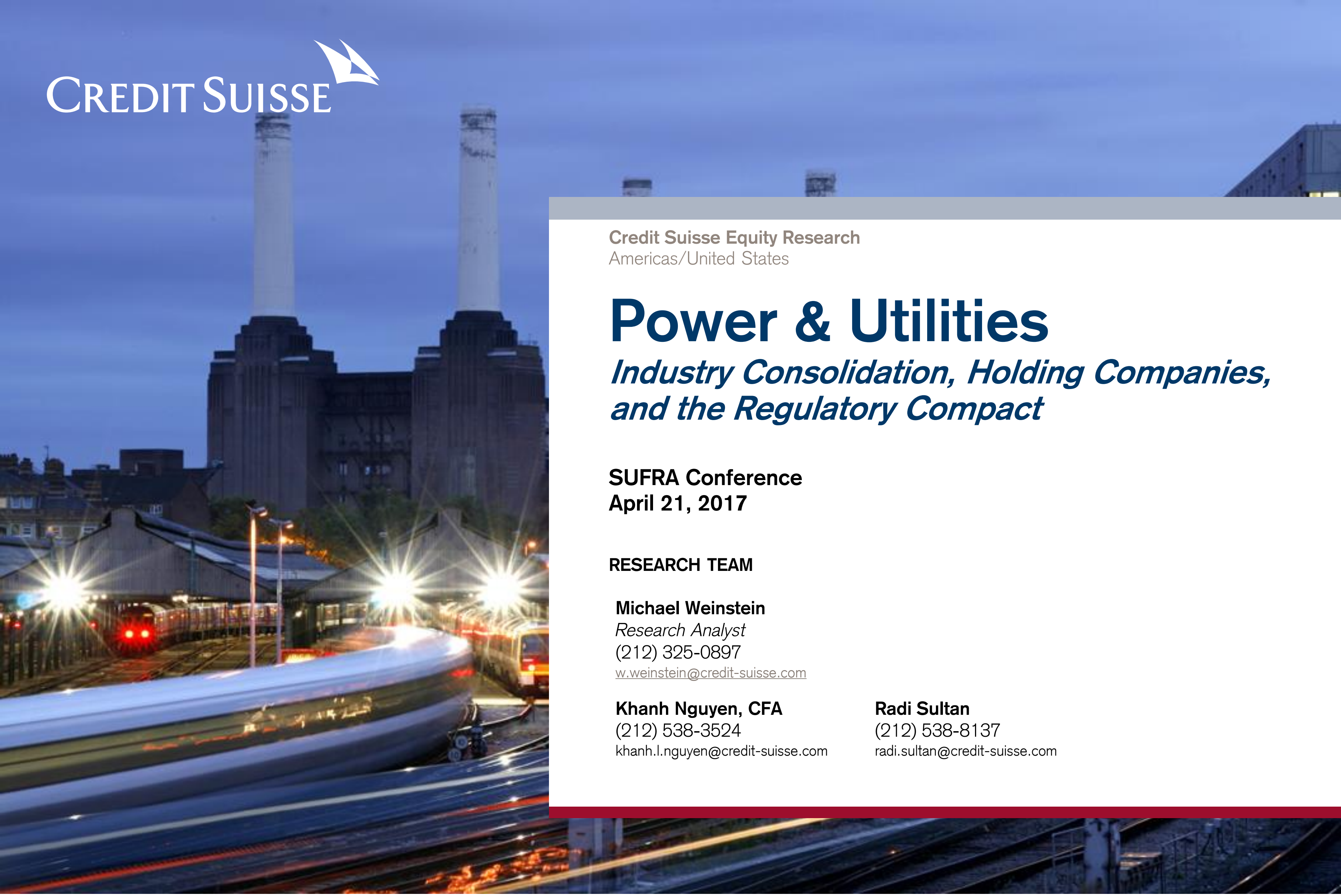

Credit Suisse Equity Research
Americas/United States

Power & Utilities

Industry Consolidation, Holding Companies, and the Regulatory Compact

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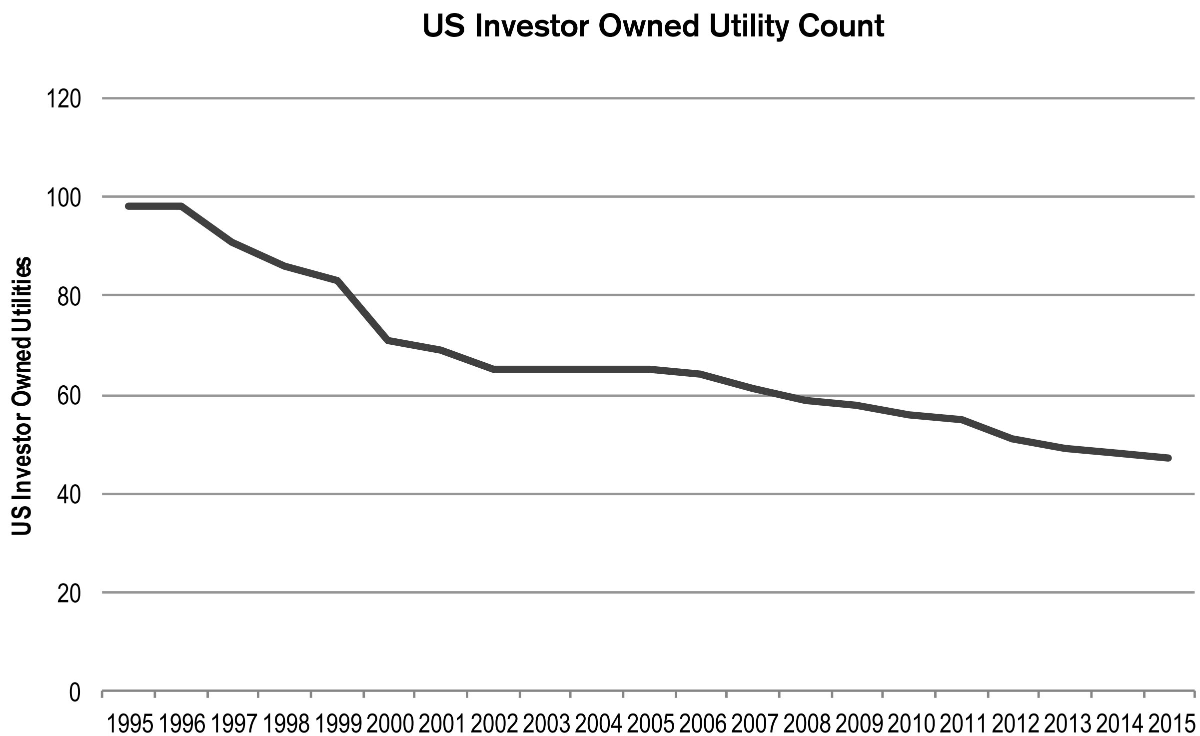
Consolidation of Investor Owned Utilities

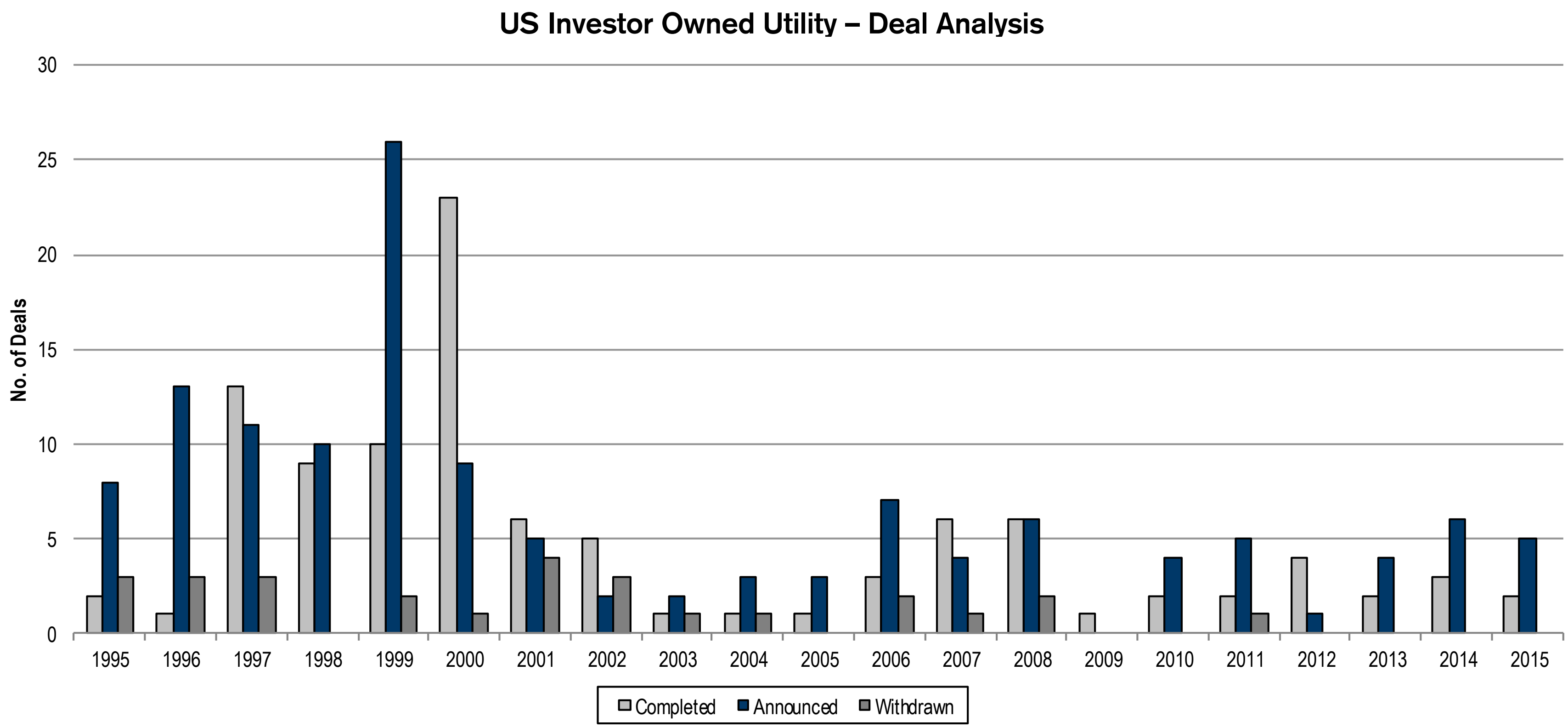
The US Investor Owned Utility (IOU) Count has halved over the past 20 years

M&A Impact on Investor-Owned Utility Count		
Year	**Count**	**Y-Y Impact**
1995	98	
1996	98	-
1997	91	(7.14%)
1998	86	(5.49%)
1999	83	(3.49%)
2000	71	(14.46%)
2001	69	(2.82%)
2002	65	(5.80%)
2003	65	-
2004	65	-
2005	65	-
2006	64	(1.54%)
2007	61	(4.69%)
2008	59	(3.28%)
2009	58	(1.69%)
2010	56	(3.45%)
2011	55	(1.79%)
2012	51	(7.27%)
2013	49	(3.92%)
2014	48	(2.04%)
2015	47	(2.08%)



Source: EEI

Deregulation Drove Utility M&A in the Late 1990s



Source: EEI

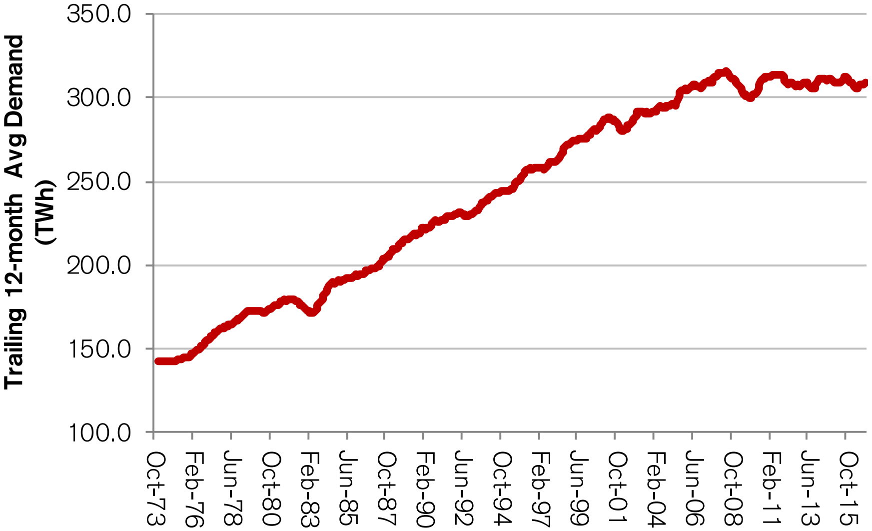
Recent Drivers of Consolidation In the Utility Industry

- **Slowing Electric Load Growth**
  - Gas utilities less impacted by energy efficiency and distributed resources
  - Acquirer has cash flow while target has investment opportunities
- **Lower ROEs & Synergies**
  - Acquirer improves operations and repairs damaged regulatory relationships
- **Weak Power Prices**
  - Reducing holding company exposure to merchant power through dilution by acquiring regulated utilities
- **Low Cost of Capital**
  - High P/Es and low interest rates may create quick EPS accretion
  - Recovery of holding company debt and goodwill
- **Tax Breaks**
  - Canadian infrastructure funds take advantage of dividend deductibility
- **Most Popular Targets:** Midstream Assets, Gas Utilities, SMID Caps

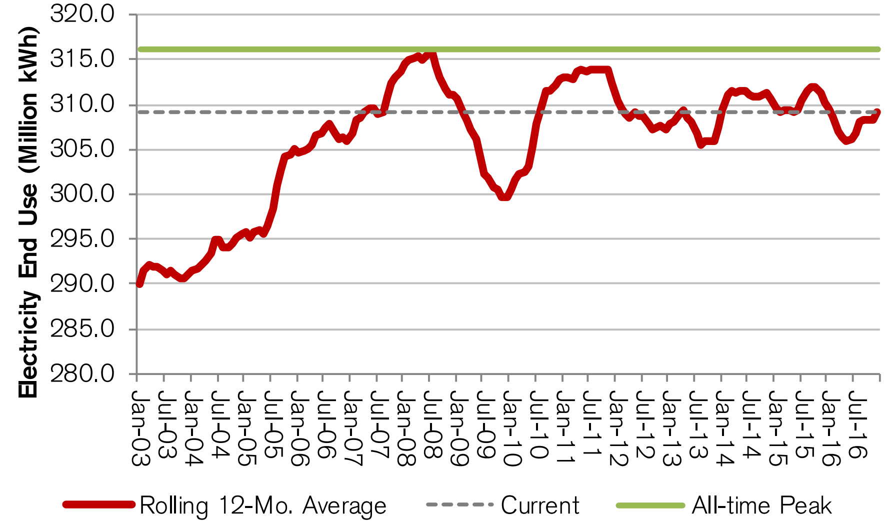
Structural Challenges: Demand Has Languished

Total US power demand is still below the highs set in 2008

Total Retail Sales 1973-Current (TWh)



Total Retail Sales 2003- Current(TWh)



- US Power demand is still net down 2.22% versus the 2008 peak before the Great Recession using trailing 12-month demand numbers.

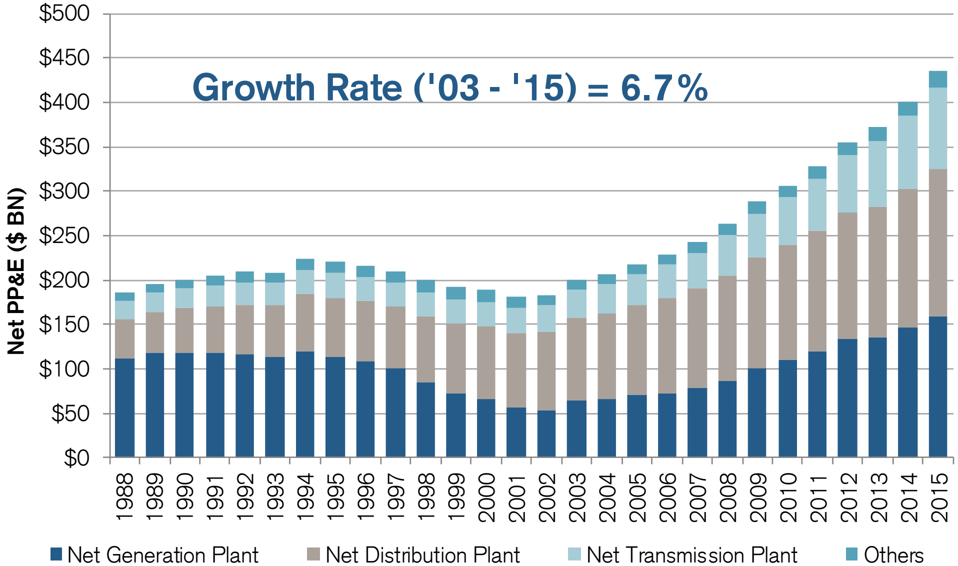
- Even more striking has been the retrenchment in consumption even from 2011 levels, highlighting the drag of energy efficiency and a level of weather normalization after a couple hot summers.

Source: EIA.gov, Credit Suisse estimates

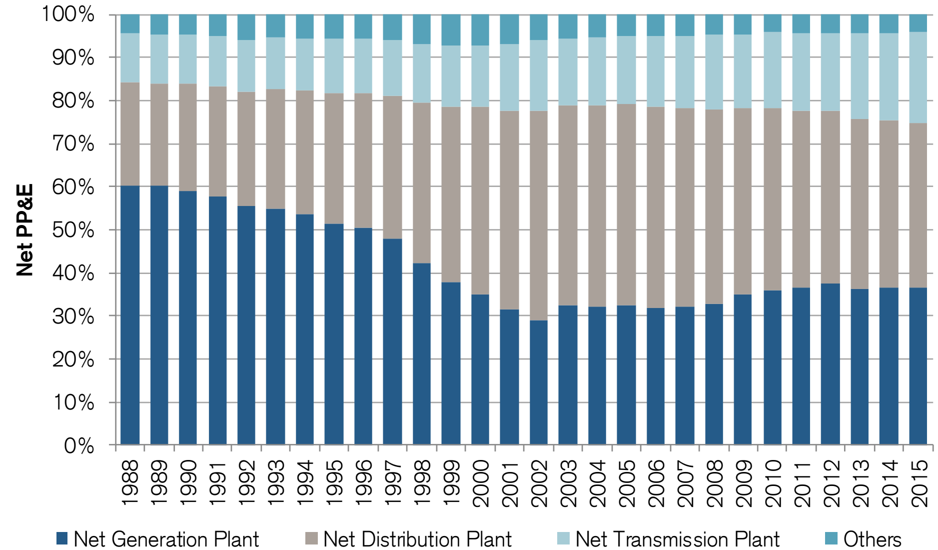
Utility Asset Growth Has Rocketed Since 2003

Total investment increases over time with transmission taking some share

Breakdown of Net PP&E ($ BN)



Breakdown of Net PP&E (%): Transmission Growing

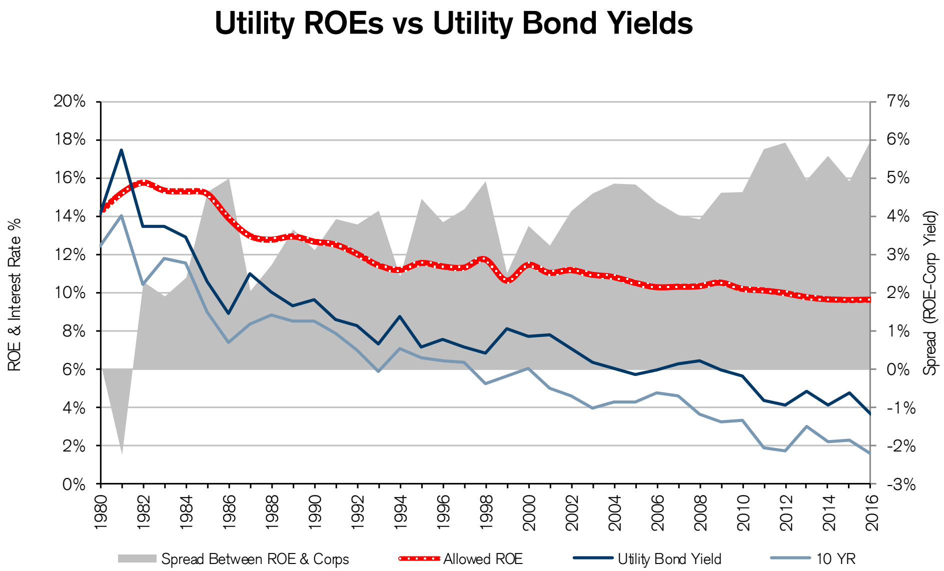


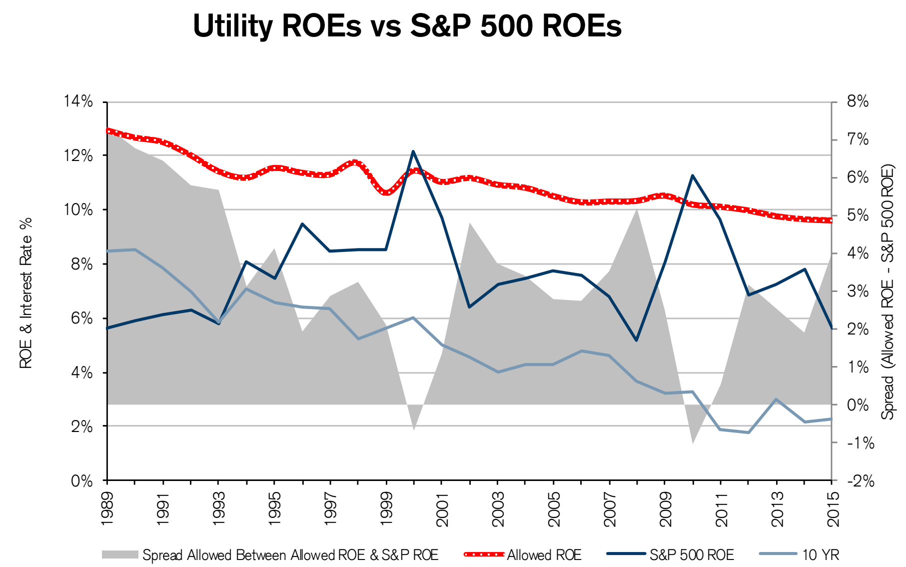
- A simple look at net PP&E for Regulated Utilities has shown ~6.7% growth starting in 2003:
  - take advantage of healthy allowed ROEs and market interest in growing yield vehicles
  - responding to environmental compliance needs and renewable mandates later in the decade, despite lackluster demand growth and requirements for new generation.
- Increasing proportion toward transmission investment, reflecting the broad need for replacement of aging equipment and renewable integration and the attractiveness of FERC regulated returns with generally higher ROEs and more timely revenue recovery (less lag).
- Going forward: we see increased transmission spending for utility scale renewables as well as significant distribution upgrades in jurisdiction with growth of distributed generation.

Source: SNL

Allowed ROEs are Lower But Still Robust Relative to Interest Rates

While lower, the spread on ROEs to interest rates remain historically wide

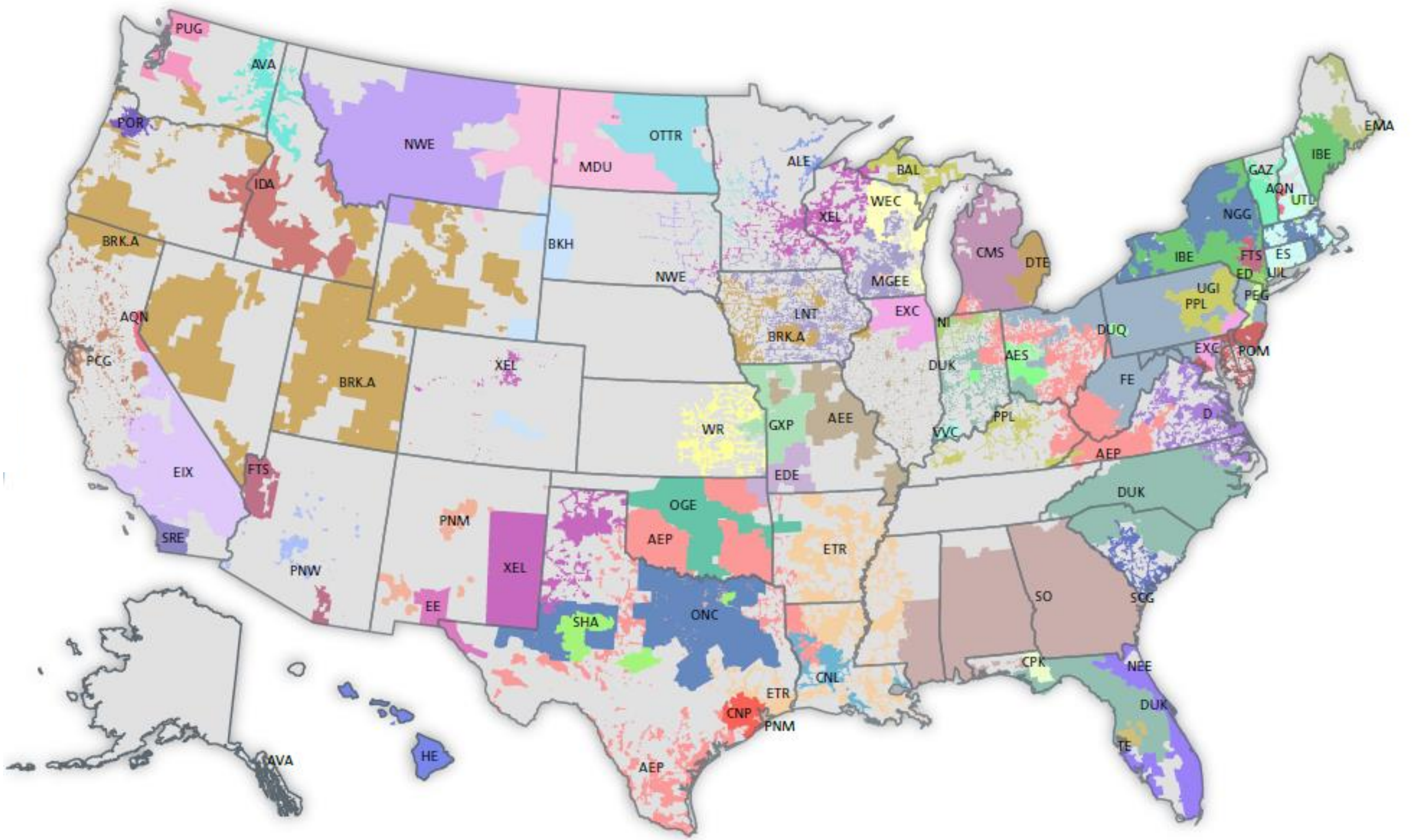




- Allowed ROEs have been resilient in a falling interest rate environment with spreads to corporate bond yields remaining around all time highs (gray shaded area).
- We think ROE durability reflects the state's desire to attract jobs in a tough economy, regulator avoidance of single digit ROEs in competition with other states for capital, and low commodity prices keeping bills low.
- Earned ROEs have tended to be closer to allowed ROEs in recent years, despite regulatory lag, as a result of ongoing O&M cost control efforts, especially in light of declining load growth, which has exacerbated the regulatory lag problem.

Source: Credit Suisse estimates, SNL Financial, Thomson Reuters, company data

Geographic Contiguity Preferred for Synergies



Source: SNL, American Public Power Association

Lowering O&M Creates Headroom to Support Incremental Capex

Reducing expenses opens up opportunity for utilities to invest additional capex at 7-8x the savings.

Savings and Incr. Capex	
Rate Base	**$7.25**
Equity	50%
ROE	10.0%
Interest Rate	5.5%
Depr Life	30
Tax Rate	**35%**
Net Income	**$0.36**
Taxes	$0.20
Pre-tax Income	**$0.56**
Int Exp	$0.20
Depr	$0.24
Revenues	**$1.00**

Cutting $1 of operating expense may allow support for $7-$8 more ratebase.

Source: Credit Suisse estimates

Regulatory Treatment for Acquisitions

- **What should regulators focus on?**
  - Strike a balance between investors and customers that results in a healthy utility with a low cost of capital.
  - Ringfencing of the utility to isolate it from parent cross-default is reasonable.
  - Excessive parent leverage still a concern if it degrades parent ability to maintain adequate levels of capital investment in the utility.
  - Regulatory restrictions on utility dividend payments are very unusual; this is typically the purview of debt covenants and their bond ratings.
  - Regulators cannot "require" investment in a system – they must attract investors and compete for capital.
  - State rules: No-Harm vs Net-Benefits. Customer benefits may be worth stretching for with extra parent leverage.
  - Time to close: 18-24 month reviews are typical and are a significant drain on corporate resources and attention.

Capital Structure Treatment for Acquisitions

- **OpCo or HoldCo?**
  - Investors want an OpCo (Utility) capital structure for the regulated entity
    - HoldCo leverage used to finance goodwill puts investor capital at risk.
    - The recovery of goodwill and a leveraged return on equity is an investment opportunity.
    - Goodwill is almost never allowed recovery in rates.
    - Synergies are typically split with customers for a set time period (rate freeze) to allow investors to recover goodwill.
  - Customers would like to receive the benefits of a cheaper WACC – they want the HoldCo structure in rates.

Capital Structure Treatment for Acquisitions

- **HoldCo capital structure considerations:**
  - If using a HoldCo structure in rates, shouldn't recovery of goodwill be included in rates too?
  - That depends: What is the source of extra HoldCo leverage? Writedowns from other business lines, prior deals, or reasonable borrowing for goodwill? Is the risk excessive?
  - Health of the parent post-deal and its ability to fund required capital programs should be the litmus test.
  - Applying a HoldCo structure without goodwill recovery requires investors to seek returns through synergies, operational improvements, and rapid growth.

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