

# CONJECTURES & REFUTATIONS: CHOICE CRITICS FAIL THE TEST

Philip R. O'Connor, Ph.D.  
President, PROactive Strategies, Inc.

# AFTER A QUIET DECADE THE DEBATE OVER ELECTRICITY CHOICE IS BACK ON THE RADAR

- M&A has continued even as the choice debate was in abeyance.
- Low/negative consumption growth and distributed resources present conventional vertically integrated model with major revenue challenges.
- Impending environmental regulations, including CO2 limits, will pose a stranded cost problem and will confront many state regulators with major investment approval cases not seen in a generation.
- The divergence in performance on price and other factors between competitive and traditional jurisdictions may present increasingly unfavorable comparisons for classic regulated vertical integration.
- Smart Grid deployment will confront regulators and vertical utilities with the question of withholding functionality from customers.
- Utilities may want “exit” strategies from regulatory uncertainty risk.

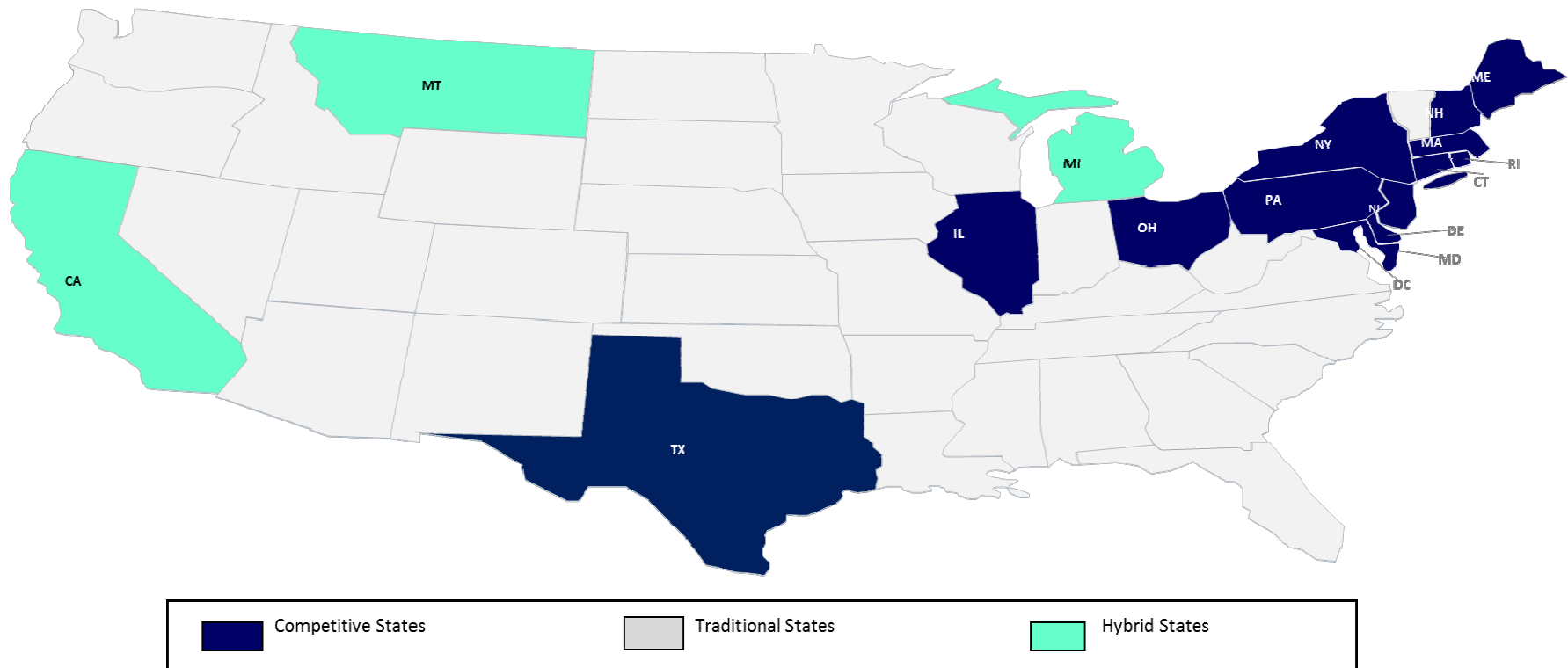
# OPPONENTS OF RETAIL CUSTOMER CHOICE OFFER FOUR KEY CONJECTURES

- 1) Retail prices in competitive states are more volatile than in traditional states and that customers benefit from “stability.”
- 2) Prices are higher in competitive states and the trends in prices are unfavorable for customers compared to traditional states.
- 3) Investment in generation has been and will be inadequate in competitive states and only traditional regulation can provide the certainty necessary for such long-term financial commitments.
- 4) Utility credit ratings will suffer under customer choice and in the end customers will suffer for poor utility credit quality.

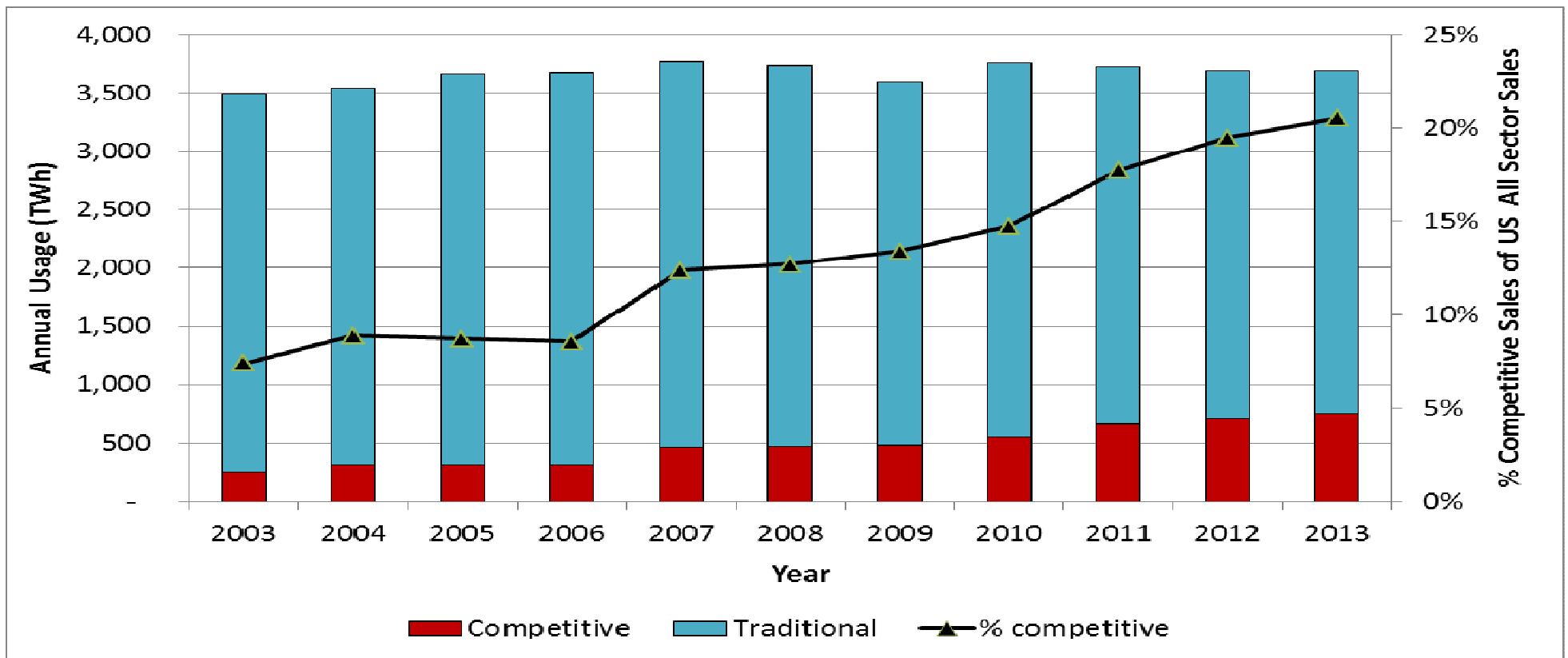
# THE FOUR CONJECTURES DO NOT SURVIVE EMPIRICAL TESTING

- **VOLATILITY:** Prices in competitive states have not been more volatile than in traditional states 1999-2013 or in the 2008-13 downturn.
- **PRICES:** Prices in competitive states 1997-2013 rose less than in traditional states and were negative versus inflation.
- **INVESTMENT:** Competitive and traditional states have both added substantial capacity in line with relative load growth, with competitive states increasing ratio of production to consumption and showing relative improvement in capacity factor compared to traditional.
- **CREDIT:** There is no discernible difference between S&P utility bond ratings in competitive and traditional states.

# 14 RETAIL COMPETITION JURISDICTIONS: 33% OF U.S. LOAD SERVED UNDER CHOICE



# 2003-13: NON-UTILITY SUPPLIER LOAD SURGED 200% v 6% FOR TOTAL U.S. LOAD



# COMPETITIVE v TRADITIONAL STATES

## ALL-SECTOR MONTHLY % PRICE VOLATILITY

Weighting	Groups	% Monthly Price Change Standard Deviation		% Monthly Price Change Coefficient of Variation	
		1999-2013	2008-2013	1999-2013	2008-2013
Unweighted	Competitive (14)	5.12	3.59	18.66	6.41
	Traditional (32)	4.15	3.82	16.93	8.19
	Hybrid (3)	5.88	3.88	16.51	7.81
Weighted	Competitive (14)	4.04	3.12	16.92	6.88
	Traditional (32)	4.08	3.86	17.40	7.49
	Hybrid (3)	5.66	5.03	15.66	9.13

# COMPETITIVE v TRADITIONAL STATES RESIDENTIAL MONTHLY % PRICE VOLATILITY

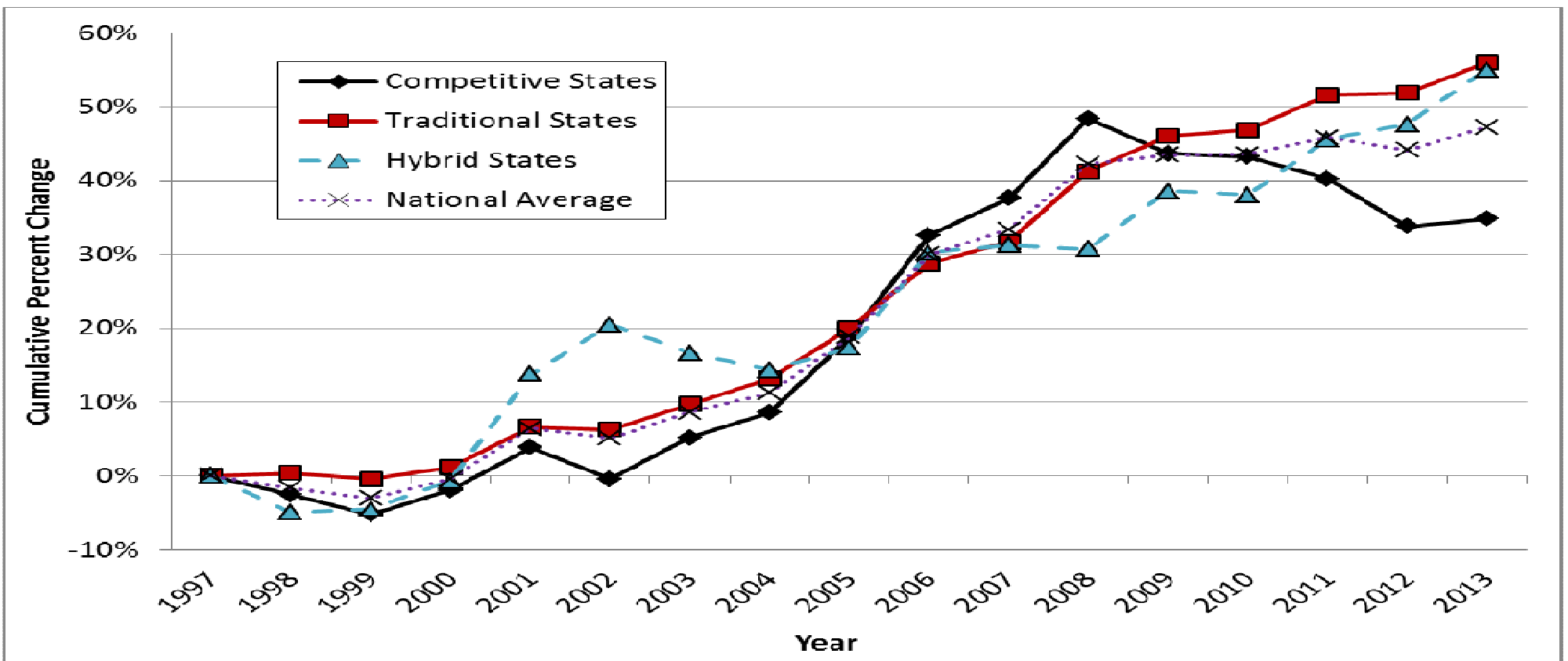
Weighting	Groups	Monthly % Price Change Standard Deviation		Monthly % Price Change Coefficient of Variation	
		1999-2013	2008-2013	1999-2013	2008-2013
Unweighted	Competitive (14)	5.17	3.97	18.09	6.66
	Traditional (32)	4.35	4.14	16.35	8.52
	Hybrid (3)	6.21	3.57	16.97	8.42
Weighted	Competitive (14)	4.00	3.18	17.11	6.81
	Traditional (32)	4.19	3.98	16.43	7.55
	Hybrid (3)	5.02	4.26	15.54	7.88



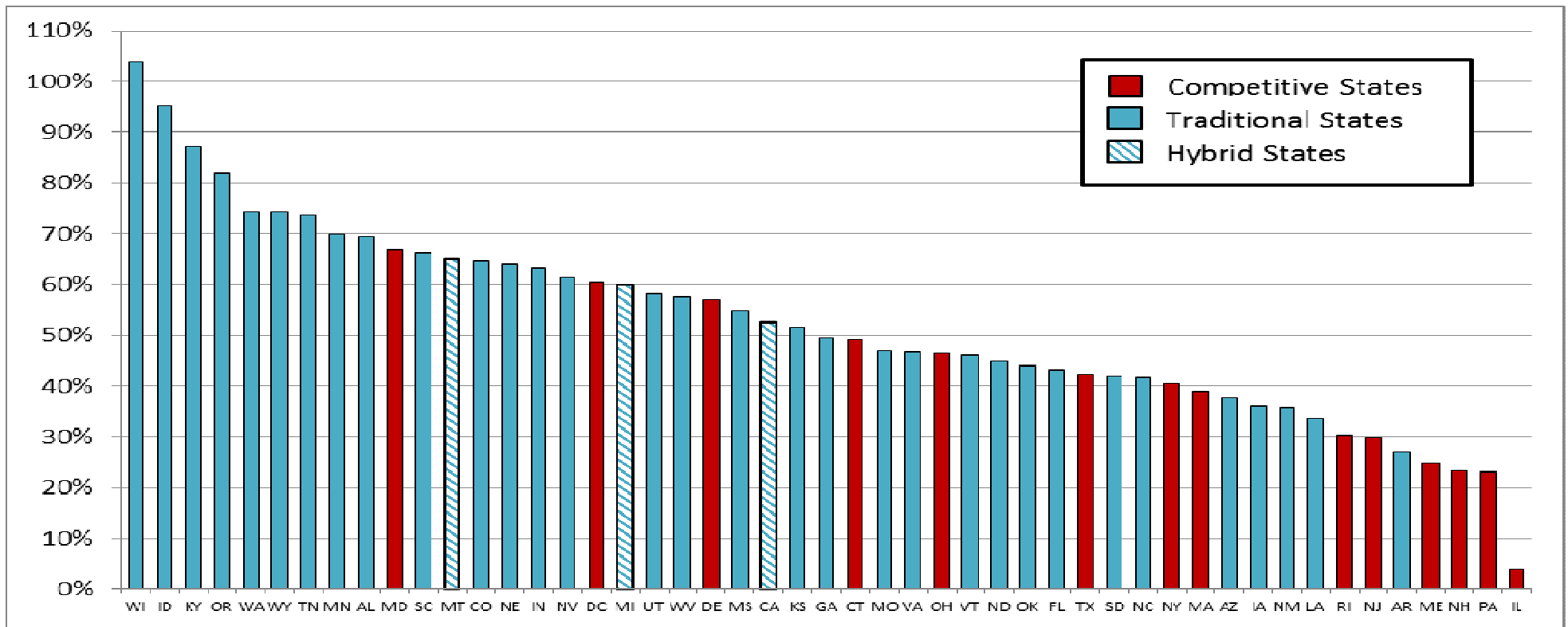
# 1997-2013: CHOICE STATES PRICES ROSE FAR LESS THAN IN TRADITIONAL STATES PRICES

	All Sectors		Residential		Commercial		Industrial	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
Competitive States	34.9%	-2.2%	33.1%	-3.5%	20.6%	-12.5%	36.5%	-1.0%
Traditional States	56.0%	13.1%	50.9%	9.4%	47.2%	6.7%	59.3%	15.5%
Hybrid States	55.0%	12.4%	49.1%	8.1%	46.6%	6.3%	56.9%	13.8%
National Average	47.3%	6.8%	43.7%	4.2%	35.6%	-1.7%	50.6%	9.2%

# FACTS REFUTE THE CLAIM THAT RESIDENTIALS ARE DISADVANTAGED BY COMPETITION



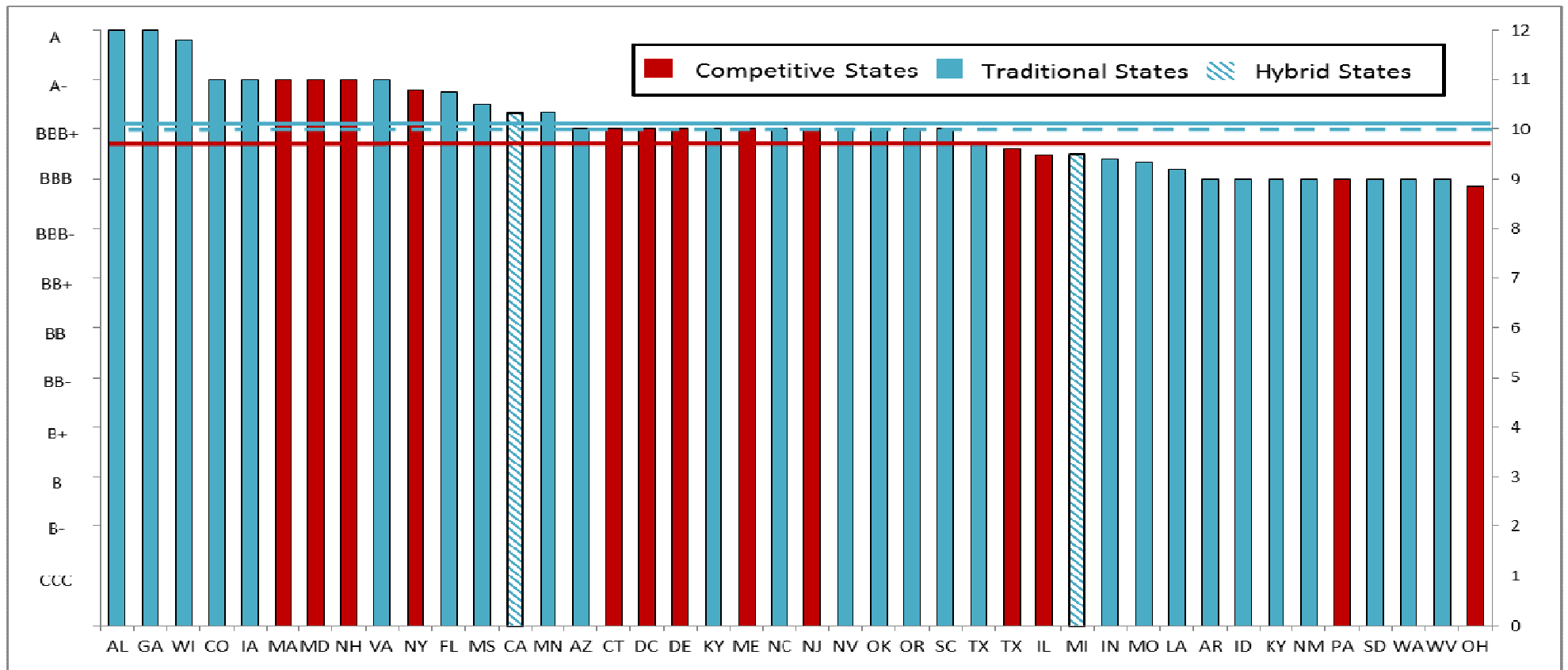
# 1997-2013: CHOICE STATES CLUSTER AT THE LOWER END OF % AVERAGE PRICE INCREASE



# 1997-2012: MW – New Capacity v Consumption, Capacity Factor, Production v Consumption

Type	MW 97	MW 12	MW Added	NC:C	CF97	CF12	P:C97	P:C12
Competitive	263,857	340,977	77,120	2.2	49%	45%	1.06	1.10
Traditional	426,646	609,229	182,583	2.0	54%	44%	1.18	1.13
Hybrid	83,781	107,978	24,197	2.5	42%	35%	0.91	0.89
Total	778,649	1,063,033	284,384	2.1	51%	43%	1.11	1.10

# S&P UTILITY CREDIT RATINGS ARE THE SAME ACROSS COMPETITIVE & TRADITIONAL STATES



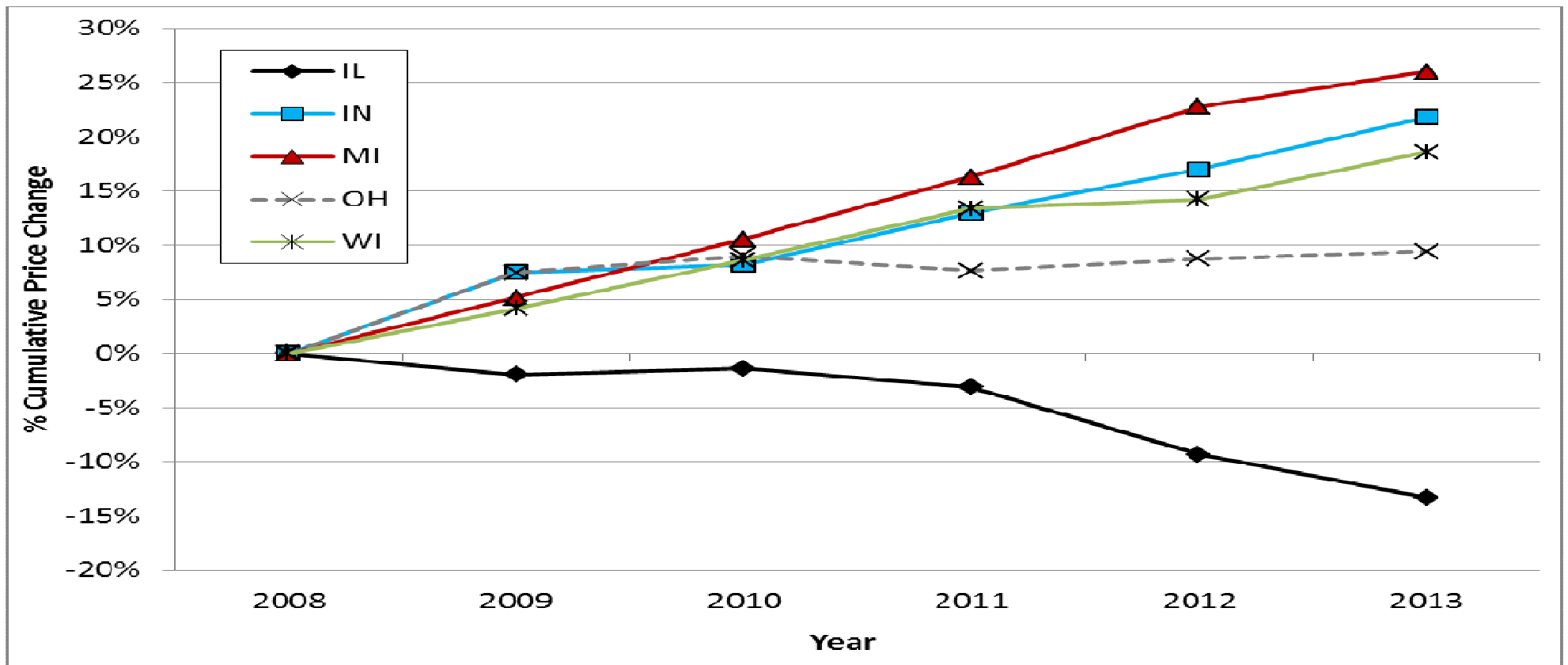
# THE ILLINOIS EXPERIENCE: A GREAT LAKES INTRA-REGIONAL COMPARISON

- Illinois has maintained a competitive policy direction for 17 years.
- Illinois electricity is almost totally competitive other than two small IOU areas and some munis and rural coops.
- The residential market has followed the C&I market to choice by reducing transaction costs: muni-agg, PoR & UCB, IPA auctions.
- Illinois delivery rate regulatory reform (EIMA) may prove to be a model for other states due to its simplicity as well as certainty with respect to recovery of Smart Grid investment.
- There is no constituency in Illinois for any significant departure from the customer choice model.

# GREAT LAKES STATES % ALL-SECTOR MONTHLY PRICE VOLATILITY 1997–2013 & 2008–13

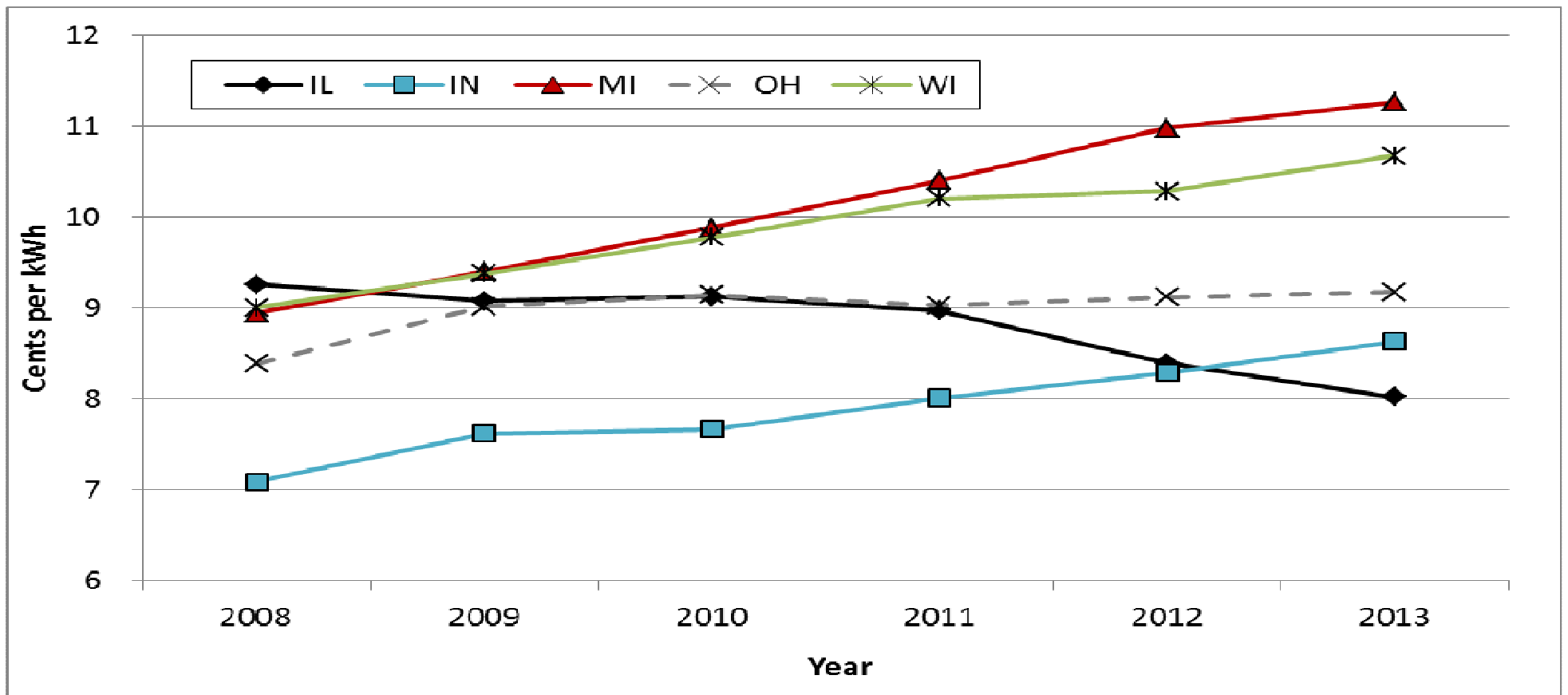
State	Monthly % Price Change Coefficient of Variation 97-13	Monthly % Price Change Coefficient of Variation 08-13
ILLINOIS	13.63	6.24
OHIO	14.40	4.54
INDIANA	18.45	6.92
MICHIGAN	18.57	9.25
WISCONSIN	21.73	6.37

# 2008-13: COMPETITIVE ILLINOIS & OHIO HAD LOWEST % PRICE CHANGE IN GREAT LAKES

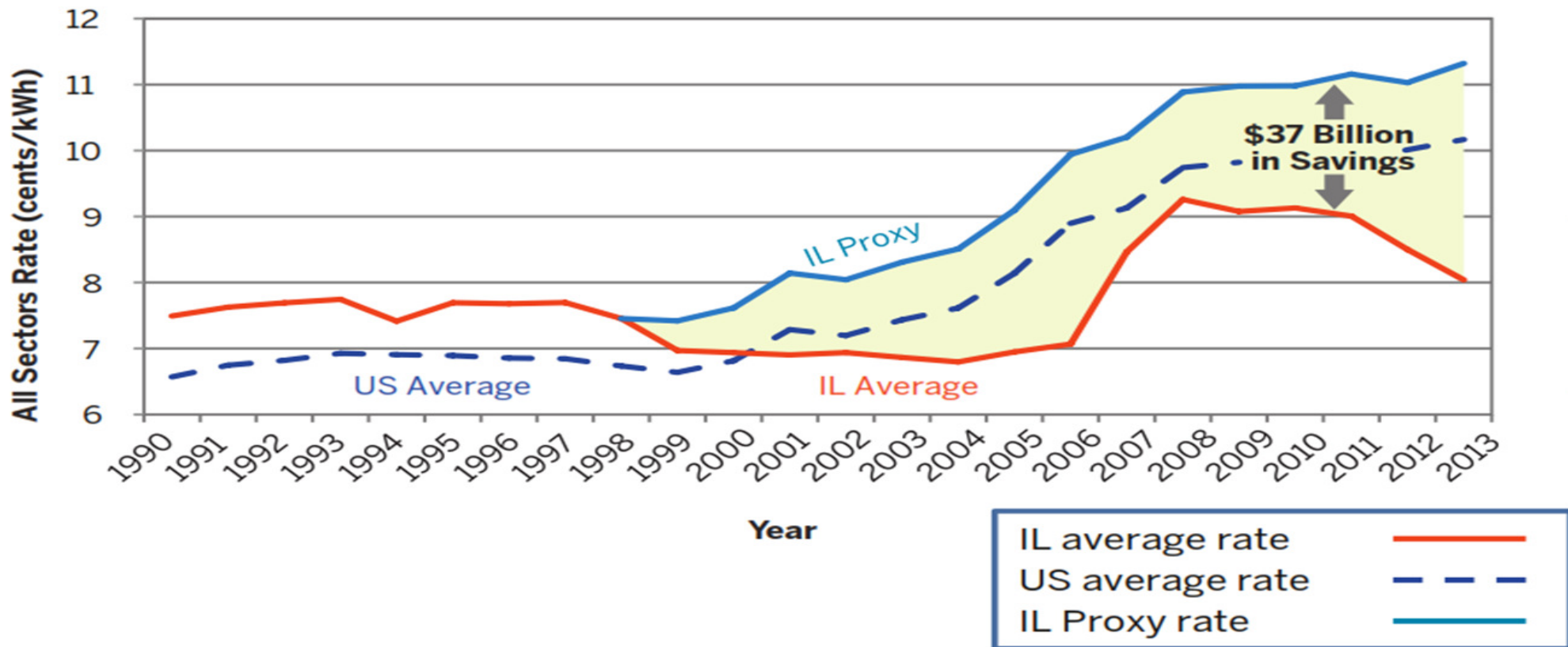




# 2008-2013: ILLINOIS WENT FROM HIGHEST TO LOWEST PRICE IN GREAT LAKES



# 1998-2013: ILLINOIS' NATIONAL PRICE POSITION IMPROVED BY \$37 BILLION



# UNDER CHOICE ILLINOIS ADDED MORE MW THAN ANY OF THE OTHER GREAT LAKES STATES

State	Nameplate Capacity (MW)		Pct. Change
	1997	2011	
Illinois	38,132	49,739	30%
Ohio	28,936	36,305	25%
Indiana	23,363	30,765	32%
Michigan	27,255	33,066	21%
Wisconsin	12,750	20,030	57%
<b>Total</b>	<b>130,436</b>	<b>169,905</b>	<b>30%</b>

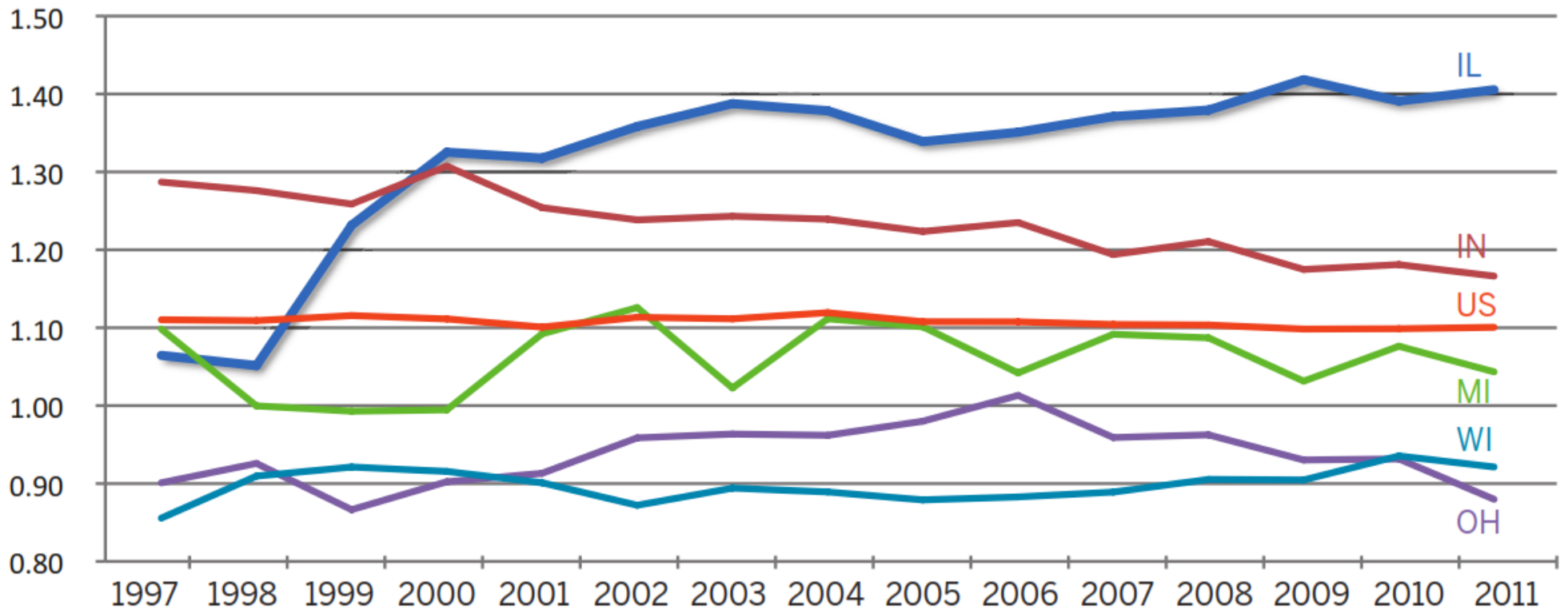
# UNDER CHOICE ILLINOIS GENERATION HAS ACHIEVED GREAT LAKES EFFICIENCY LEAD

State	MWh Production per MW Capacity		Capacity Factor	
	1997	2011	1997	2011
Illinois	3,544	3,983	40%	45%
Ohio	4,935	3,764	56%	43%
Indiana	4,911	3,949	56%	45%
Michigan	3,925	3,309	45%	38%
Wisconsin	4,032	3,322	46%	38%

# Great Lakes States MW Installed, Capacity Factor, Production/ Consumption Ratio 1997–2012

State	MW 97	MW 12	MW Added	% MW Added	CF97	CF12	P:C97	P:C12
IL	34,478	45,146	10,668	31%	45%	50%	1.06	1.39
OH	26,951	32,854	5,903	22%	60%	45%	0.90	0.85
MI	24,859	30,332	5,473	22%	49%	41%	1.10	1.04
IN	21,039	26,837	5,799	28%	62%	49%	1.29	1.10
WI	12,573	18,031	5,459	43%	47%	40%	0.86	0.93
Total	119,900	153,200	33,301	28%	52%	46%	1.04	1.07

# UNDER CHOICE ILLINOIS HAS BECOME THE GREAT LAKES PRIMARY POWER EXPORTER



# Philip R. O'Connor, Ph.D.

PROactive-Strategies, Inc. -- Chicago, Illinois

**Dr. Phil O'Connor is President of PROactive Strategies, a Chicago consulting firm providing advice in the energy and insurance industries. For over two decades Phil has been recognized as a leading advocate of competitive market solutions for regulated businesses.**

**Phil is the author of *Customer Choice in Electricity Markets: From Novel to Normal*, published by COMPETE Coalition in November 2010 and co-author with Terrence L. Barnich of "The Grand Experiment: Has Restructuring Succeeded on Either Continent?", published in *Public Utilities Fortnightly*, February 2007. He co-authored with John L. Domagalski "Regulation and Relevancy: Assessing the Impact of Electricity Customer Choice," in *ElectricityPolicy.com*, January 2013 and with Jonathan A. Lesser, "The Electricity Choice Debate: Conjectures and Refutations" in *The Electricity Journal*, Aug/Sep 2014.**

**In addition to a lengthy career in the private sector, Phil has had extensive government and political experience, having chaired the Illinois Commerce Commission serving as Director of the Illinois Department of Insurance and as a member of the Illinois State Board of Elections. Five consecutive Illinois Governors have appointed him to various boards and commissions.**

**From March 2007 to March 2008, Phil served in the U.S. Embassy in Baghdad, Iraq with the US Army Corps of Engineers and the US State Department as an advisor to the Iraqi Ministry of Electricity. A *magna cum laude* graduate of Loyola University of Chicago, Phil received his Masters and Doctorate in Political Science from Northwestern University.**

[Phil.OConnor@PROactive-Strategies.net](mailto:Phil.OConnor@PROactive-Strategies.net) 312-446-3536 312-9804860