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June 11, 2015

Ms. Luly Massaro, Clerk
Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

Re: *Pawtucket Water Supply Board, General Rate Filing*
Docket No. 4550

Dear Ms. Massaro:

Enclosed please find an original and nine (9) copies of the following document:

1. The Pawtucket Water Supply Board's Response to the Town of Cumberland's Data Requests (Set 4).

Please note that an electronic copy of this document has been provided to the service list.

Thank you for your attention to this matter.

Sincerely,



Joseph A. Keough Jr.

JAK/kf
Enclosures
cc: Karen Lyons, Esquire

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Town of Cumberland's

Data Requests

Set 4

Cumb. 4-1: [Ref – PWSB's Response to Cumb. 2-3] Would you agree that if PWSB were to have sales in FY2016 equal to the levels allowed by the RIPUC in Docket 4171 and that its miscellaneous Income/revenues expected in FY2016 were the same as in Calendar 2011 (and all else being equal as specified on page 4 of Mr. Woodcock's Testimony), that PWSB would be seeking an increase of \$904,313 in the current case?

Response: Yes.

Prepared by: C. Woodcock

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Town of Cumberland's

Data Requests

Set 4

Cumb. 4-2: [Ref – PWSB’s Response to Cumb. 2-7] What are the long term vacant positions (title, pay grade and union affiliation) that were not included in this case? What are the salaries and benefits associated with each of these positions?

Response:

<u>Job Title</u>	<u>Pay Plan Code</u>	<u>POSITION TYPE</u>	<u>AFSCME</u>	<u>TEAMSTER</u>	<u>NONUNION</u>	<u>Regular Salary</u>	<u>Benefits</u>
Information Systems Specialist	W11	U		Y		51,010.76	31,052.18
Sr. Water Project Engineer	W12	U		Y		61,801.76	34,550.02
Jr. Water Project Engineer	R36	U	Y			39,520.75	28,854.99
Water Board Engineering Clerk	R36	U	Y			39,520.75	28,854.99
Water Meter Service Technician	R32	U	Y			37,681.33	28,591.79
Water Meter Reader Service Person	R28	U	Y			35,984.14	28,148.66

Prepared by: R. Benson

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Town of Cumberland's

Data Requests

Set 4

Cumb. 4-3: [Ref – PWSB's Response to Cumb. 2-12] What would the "Rate Year Monthly" number of meters be for each meter size if you had used the same 3 year (FY2012 to FY2014) method you used to adjust/estimate sales in FY2016?

Response:

5/8	21,567
3/4	262
1	514
1 1/2	218
2	302
3	15
4	10
6	2

Prepared by: C. Woodcock

Cumb. 4-4: [Ref – PWSB's Response to Cumb. 2-15] Because the Commission approved the use of certain factors in a prior case, does that mean the Commission (even if comprised of the same members) must approve exactly the same factors in this case as it approved (or didn't disapprove) in the prior case? If affirmative, please site the specific law or regulation supporting this belief. If PWSB believes this is the case in law or regulation, please disregard the following Information Requests (IRs). If PWSB believes that this is not necessarily the case in law or regulation, please respond to the following IRs. What is the source of each of the MAXIMUM DAY Demand Factors used on Sch. 2.2 (and carried over from the prior case). If any assumptions or calculations were used to derive each factor, provide a detailed discussion of any assumptions and the computations used to derive each factor. Provide your justification for using each demand factor. Were any of these factors derived from data and analysis specific to the PWSB system or are they applicable to other water systems or general industry estimates? Have you performed or are you aware of any study or analysis that was, or could be, used to derive demand factors based on the specific demands placed on PWSB's system? If affirmative, please provide a reference for each.

Response: The first part of this request calls for a legal conclusion, and the PWSB's legal counsel responds as follows:

Whether a prior Commission Ruling must be upheld in a subsequent docket depends on the applicable facts and circumstances. Three primary judicial doctrines require varying degrees of deference to earlier judicial decisions. The doctrine of stare decisis dictates that courts should adopt the reasoning of earlier judicial decisions if the same points arise again in litigation. This principle is not absolute, however, and courts may abandon previously adopted rules of law under the right circumstances. *State v. Werner*, 615 A.2d 1010 (R.I.1992). Collateral estoppel is a more rigid doctrine, in that it "bars litigation of an issue when that issue has been determined by a valid and final judgment." *DeCiantis v. State*, 666 A.2d 410 (R.I.1995). The doctrine of res judicata has an even greater preclusive effect, in that "it makes a prior judgment in a civil action between the same parties conclusive with regard to any issues that were litigated in the prior

action, or, that could have been presented and litigated therein.” ElGabri v. Lekas, 681 A.2d 271 (R.I.1996). Thus, “[a] party defeated in one action cannot maintain a second action based on a ground which could properly have been, but was not, set forth and relied upon in the former action.” *Id.*

There is also the Doctrine of Administrative Finality, which differs from the rigid doctrines of collateral estoppel and res judicata, and is more akin to the doctrine of stare decisis. The Doctrine of Administrative Finality provides for a qualified and limited preclusion rather than an absolute bar. In Johnston Ambulatory Surgical Associates Ltd. v. Nolan, 755 A.2d 799 (RI 2000), the Rhode Island Supreme Court held that: “when an administrative agency receives an application for relief and denies it, a subsequent application for the same relief may not be granted absent a showing of a change in material circumstances during the time between the two applications. This rule applies as long as the outcome sought in each application is substantially similar, even if the two applications each rely on different legal theories. Without waiving any rights the PWSB may have under these doctrines, it responds to the questions posed herein below.

Prepared by: Joseph A. Keough Jr., Esquire

The factors shown on Woodcock Sch. 2.2 have been used and approved by the Commission in every PWSB docket since Docket No. 3378 (2002). My testimony in that case stated, “There are no demand studies of the users of the Pawtucket system. As a result I have had to rely on studies conducted elsewhere, the usage data that is available in Pawtucket, and my judgment. I believe the values I have presented for maximum day and peak hour non-coincident demands for each customer class fairly present the approximate uses by these classes.” (page 14, lines 21-26)

Division Data Request 1-11 in Docket No. 3378 asked the PWSB to “Please provide any documents or other information relied upon in selecting the maximum day and peak hour demand factors for each customer class.” My response to this request is attached.

STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

DOCKET NO. 4550

Response Of The Pawtucket Water Supply Board

To The Town of Cumberland's

Data Requests

Set 4

An intervenor in Docket 3378 (OSRAM) asked a similar question to Div 1-11 above. The response referred back to the response to Div 1-11. Again, Mr. Catlin, on behalf of the Division, accepted these factors in Docket 3378.

I would note that the diversity factors in Docket No. 3378 were 1.47 for the Maximum Day Factor and 1.30 for the Peak Hour. The AWWA M1 Manual now suggests a range of 1.1 to 1.4 for the diversity factors. As indicated above, the Peak Hour factor fell within this range and the Maximum Day factor slightly exceeded it.

In reviewing the response to Div. 1-6 in this docket, it is apparent that the maximum day demand factor for Cumberland should be closer to 4.5-4.9 rather than the 2.5 factor that has been used. In order to derive diversity factors that are in line with those in the AWWA M1 Guidance, the retail factors would need to be revised along with the wholesale factors. A set of maximum day and peak hour ratios that results in diversity factors within the Guidance would be:

	<u>Max Day</u>	<u>Peak Hour</u>
Small (5/8 - 1")	2.20	2.25
Medium (1.5 - 2" & By pass)	2.00	2.05
Large (3" and up)	1.70	1.75
Cumberland	4.75	4.75
Diversity Factors	1.41	1.43

Prepared by: C. Woodcock

**Pawtucket Water Supply Board's Responses to
 First Set of Data Requests
 of the Division of Public Utilities and Carriers
 to Pawtucket Water Supply Board
 Docket No. 3378**

DIV 1-11. Please provide any documents or other information relied upon in selecting the maximum day and peak hour demand factors for each customer class.

Response: As there is no data for the designated customer classes in Pawtucket, we had to rely on information derived elsewhere. The only exception is data for OSRAM (see attached). Attached are studies and results from other water systems that were reviewed and considered for this docket. It is important to note that no specific study was used to derive these demand factors. It is also important to note that the demands are non-coincident demands – that is, different classes may have peaks at different times, so the sum of the non-coincident peaks will exceed the total system peak demands. To test the assumed demand factors for reasonableness, I compared the sum of non-coincident demands for each class to the system wide peak demands. This comparison showed that the system wide maximum day demand was 68% of the sum of non-coincident class maximum day demands; and the (estimated – see response to Div 1-8) system wide peak hour demand was 77% of the sum of non-coincident class peak hour demands. I found these values to be consistent with what one would expect from such a comparison, and concluded that the class demand factors were thus reasonable estimates.

Peak demands for wholesale customers are derived from pumping records.

	FY 2001	FY 2000	FY 1999	FY 1998
Max hr (MGD)	4.0	4.1	4.5	4.5
Max day(MGD)	2.3	1.7	2.4	NA

Response by: C. Woodcock/ P. Marchand

Rattelis Financial Consulting
Capacity Factor Analysis

		Max Day					Max Hour					
		Residential	Multi-Family	Commercial	Industrial	Wholesale	Residential	Multi-Family	Commercial	Industrial	Wholesale	
Kentucky-American Water Company	1999	1.90		1.85	1.69			2.62	2.13			Customer Class Water Demand Study
Passaic Valley Water Commission	1999	2.20		1.90	1.20	1.20	3.70	3.10	2.10	2.00		Docket 3163 KCWA Data Request #1
Orange Water and Sewer Authority (NC)	1998	2.00	1.40	1.50	1.50		3.50	2.30	2.50	2.50		Water and Sewer Rates Report, January 1998
Kentucky-American Water Company	1997			1.67	1.53			2.76	2.03			Customer Class Water Demand Study
County Water District of Billing Heights ⁽¹⁾	1996	2.60		1.75	1.50		4.00	3.00	2.00			Arbitration Position Report/COS Water Rate Study
Greenville Utilities Commission	1995	2.00		1.00	1.00		3.00	2.00	1.25			RFC Water and Sewer COS and Rate Structure Study
Austin, Texas (Inside-City)	1992	2.24	1.40	1.30	1.09	1.92 ⁽²⁾	3.53	0.82	0.93	1.26	2.36 ⁽²⁾	Excerpt from Austin Cost of Service Study
Austin, Texas (Outside-City)	1992	2.48	0.89	1.17	N/A	1.92 ⁽²⁾	3.91	0.52	0.84	N/A	2.36 ⁽²⁾	Excerpt from Austin Cost of Service Study
Spartanburg Water System, South Carolina	1990	2.20		1.50	1.20	1.50	3.75	2.75	1.75	1.67		Emst & Young Water COS and Rate Structure Study
Philadelphia Suburban Water Company ⁽¹⁾	1992-199	2.24		1.81	1.71		4.69	4.32	2.85			Scott Rubin (Averages of Years 1992-1996)
Average		2.21	1.23	1.55	1.38	1.35	3.76	1.21	2.48	1.99	1.84	

(1) Capacity factors are for inside-city. Outside-city factors only differed in the industrial class as follows: max day 1.7, max hour 1.7

(2) Wholesale Capacity Factors are for both inside and outside city. The factors are an average of five wholesale customers.

(3) Data gathered was previously broken down into very specific customer types and averaged for years 1992-1996. Rattelis Financial Consulting averaged the data for the specific customer

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Page 1

COMPARISON OF WATER UTILITIES
DUES AND DIVERSIFICATION RATIOS

OK

Location		Rate Ref.	Inst. Year	System Diversification Ratios		Round-trip Demand Ratios by Customer Class					
City	State			MB/AD	MR/AD	MB/AD			MR/AD		
			Water Sales			Res.	Com.	Ind.	Res.	Com.	Ind.
Albion	SD	(a)	2.40	2.50	5.00	1.40	2.50	1.75	3.30	4.00	3.50
Arvada	CO	(a)	12.48	3.30	5.75	1.60	3.00	--	3.80	4.50	--
Ashtabula	OH		3.17	1.70	2.25	1.75	2.25	1.90	4.50	3.50	2.75
Austin	TX		57.58	2.25	3.70	2.75	--2.50--	--	1.00	--4.25--	--
Bartlesville	OK		6.00	2.10	3.45	3.00	2.25	2.00	3.25	4.00	2.75
Bellaire	TX		5.84	1.30	3.30	3.30	2.35	1.85	1.50	4.00	2.25
Bloomington	IL		13.14	1.70	2.30	2.30	1.80	1.70	1.50	2.75	2.25
Billing	MT		13.76	2.30	4.00	1.30	2.30	1.75	5.20	4.00	2.75
Bloomington	IN		10.47	1.40	2.22	2.25	1.75	1.40	3.80	2.75	1.80
Bloomington	IN	(a)	4.82	3.00	6.00	3.25	--2.75--	--	6.70	--3.50--	--
Bloomington	IL		4.40	1.67	2.50	--2.25--	--	1.50	--3.25--	--	1.30
Boulder	CO	(a)	16.66	2.60	4.30	1.30	2.60	1.90	3.30	3.30	2.75
Brooklyn Park	MN	(a)	2.30	3.30	5.00	4.00	3.00	--	4.30	4.50	--
Casper	WY		7.00	3.00	6.00	3.75	2.75	--	7.75	4.75	--
Charleston	SC		45.31	1.40	1.40	2.00	1.30	1.25	3.20	2.40	1.75
Clayton	VT	(a)	9.00	2.20	3.00	3.25	2.00	1.50	6.00	3.75	2.55
Cincinnati	OH		104.48	1.44	2.92	2.25	2.00	1.30	4.00	3.80	2.25
Cloquet	MN		0.81	1.80	2.04	2.50	1.25	1.50	4.00	2.50	1.75
Columbus	OH		87.00	1.30	2.25	2.25	1.30	1.25	3.50	2.75	1.75
Columbia	MO		2.01	2.00	3.00	2.50	2.25	2.80	4.00	3.30	2.90
Conover	NC		40.72	1.50	2.00	3.00	1.60	1.20	3.00	2.25	1.60
Conover	NC		1.33	3.80	5.00	3.75	2.75	--	4.25	4.50	--
Contra Costa County	CA	(a)	18.20	3.30	4.00	3.20	2.50	2.25	5.10	4.00	3.00
Dallas	TX		140.00	2.30	4.00	--2.85--	--	1.80	--3.25--	--	2.40
Dayton	OH		7.88	1.35	1.87	2.25	2.00	1.65	3.75	3.00	2.25
Denver	CO		189.25	2.94	4.76	3.30	2.20	1.40	4.60	4.50	2.25
Durham	NC		1.44	2.40	6.00	3.00	--2.00--	--	4.00	--4.00--	--
Evansville	IN		0.25	2.75	3.00	3.50	2.00	--	4.50	3.50	--
Flagstaff	AZ	(a)	5.44	1.50	2.00	2.35	2.75	3.25	5.25	5.50	3.50
Flint	MI		23.04	1.50	2.85	--2.25--	--	1.30	--3.00--	--	1.70
Fort Collins	CO	(a)	10.13	2.70	5.40	3.75	2.75	--	5.50	5.50	--
Fort Worth	TX		24.73	2.30	3.30	3.20	2.20	1.60	6.40	4.00	2.50
Garrettsville	OH		2.53	2.45	3.25	3.00	2.00	2.00	6.00	3.50	3.50
Glenn	CA		0.51	2.30	4.00	3.00	2.00	--	3.00	3.50	--
Grasby	CO		12.10	2.40	3.67	3.25	2.20	1.50	3.30	3.50	2.30
Greenville	SC	(a)	32.24	1.50	2.25	2.25	1.50	1.10	4.00	3.25	2.00
Hays	KS		1.39	3.00	8.00	3.75	2.25	1.75	7.75	4.25	3.25
Harris County	TX		22.73	1.80	2.80	3.10	1.75	1.30	3.25	2.50	2.25
Indianapolis	IN		81.18	1.60	2.00	2.50	2.00	1.60	3.50	2.80	1.80
Jacksonville	FL	(d)	39.04	1.25	1.70	2.00	1.70	1.20	3.30	2.70	2.30
Jasper	AL		4.20	1.60	2.40	2.75	2.00	1.25	4.50	3.20	1.75
Jackson Parish	LA	(a)	54.00	2.00	2.20	2.45	--1.75--	--	2.75	--2.00--	--
Johnson County	KS	(a)(d)	22.97	2.40	4.00	2.80	2.85	--	5.25	4.20	--
Kalamazoo	MI		16.84	2.30	3.30	3.50	2.55	1.65	5.50	4.00	2.35
Kansas City	MO	(d)	81.57	1.50	2.00	2.40	2.00	1.35	4.50	3.75	2.00
Lebanon	IL		14.33	2.00	3.30	2.70	2.25	1.70	5.00	3.50	2.50
Lawrence	KS	(a)	6.40	2.00	3.30	2.80	2.25	--	4.65	3.50	--

TABULATION OF MAXIMUM DAY AND MAXIMUM HOUR WATER DEMAND RATIOS

Company or Source	Maximum Day Ratios			Maximum Hour Ratios		
	Residential	Commercial	Industrial	Residential	Commercial	Industrial
Gannett Flemming Studies						
Pennsylvania-American Water Company	2.5	1.5	1.4	4.0	3.0	2.0
Pennsylvania-Suburban Water Company	2.0	1.5	1.4	4.0	3.2	2.6
The York Water Company	2.5	1.6	1.5	4.5	3.3	2.7
Chester Water Authority						
gravity	2.0	1.8	1.2	4.0	3.0	1.4
pumped	2.5	2.0	1.4	4.5	3.5	2.0
The Roaring Creek Water Company	2.0	1.8	1.4	4.0	3.0	2.0
Reynolds Water Company	3.0	1.8	1.4	5.0	3.0	2.0
Shenango Valley Water Company	2.0	1.8	1.3	4.0	3.0	2.0
Citizens Utilities Water Co. of Pa.	3.0	1.8	1.4	5.0	3.0	2.0
Octoraro Water Company	3.0	1.8	1.4	5.0	3.0	2.0
PAWC PREDECESSORS						
Western Pennsylvania Water Company	2.0	1.4	1.3	3.5	2.5	2.0
Pennsylvania-American Water Company	2.4	1.7	1.3	3.6	2.5	2.0
AWWA Rate Manuals						
AWWA Manual M1-Third Edition	2.5	2.0	1.5	4.0	3.3	2.0
AWWA Manual M1-Second Edition	3.0	1.8	1.4	5.0	3.0	2.0
Johns Hopkins' study for HUD (mean-East)	2.5	-	-	5.9	-	-
Giavastella - Newtown	1.8	1.5	1.2	2.8	2.3	1.8
KCWA Dick 2555 MD ^{MD} _{U#}						
Small 2.7						3.4
Med 2.0						2.4
Lrg 1.4						1.4
Austin TX (CR92)						
System 1.6 (226)						
in 2.24		1.30	1.09	3.53	.93	1.26
out 2.48		1.17		3.91	.89	

Docket 3163 KCWA Data Request # 1

38. Regarding Mr. Olstein's testimony. Page 15, line 11: What was the similar "northeastern water system" referenced, when was the analysis performed, and what were the actual maximum day and maximum hour demands for each classification in that study?

A. The system was Passaic Valley Water Commission, the analysis was performed in 1999, the demand distribution was residential 33%, commercial 12%, industrial 18% and wholesale 37%. The demand factors utilized are summarized below:

Class	Max Hour	Max Day	Average Day
Residential	3.70	2.20	1.00
Commercial	3.10	1.90	1.00
Industrial	2.10	1.20	1.00
Wholesale	2.00	1.20	1.00
<i>System Wide</i>	2.71	1.61	1.00

OSRAM

	<u>Avg Day</u>	<u>Max Day by W</u>	<u>Factor</u>
FY 98	669,435	959,715	1.43
FY 99	708,225	975,654	1.38
FY 00	765,901	1,271,920	1.66

1.50 = avg

Total Usage & Calculated Average Daily Usage:
FY98 through FY00

Water Usage

Year	Dates	# Days	BEGINNING METER NUMBER	ENDING METER NUMBER	GALLONS WATER USED	Average Daily Usage
FY98	10/01/97 TO 10/31/97	31	93073470	95688310	19,611,300	632,623
FY98	11/01/97 TO 11/30/97	30	95688310	98153200	18,486,675	616,223
FY98	12/01/97 TO 12/31/97	31	98153200	100383170	16,724,775	539,509
FY98	01/01/98 TO 01/31/98	31	100383170	103979700	26,973,975	870,128
FY98	02/01/98 TO 02/28/98	28	103979700	106408930	18,219,225	650,687
FY98	03/01/98 TO 03/31/98	31	106408930	108415180	15,046,875	485,383
FY98	04/01/98 TO 04/30/98	30	108415180	110510900	15,717,900	523,930
FY98	05/01/98 TO 05/31/98	31	110510900	113230960	20,400,450	658,079
FY98	06/01/98 TO 06/07/98	7	113230960	113920300	5,170,050	738,579
FY98	06/08/98 TO 06/14/98	7	113920300	114590170	5,024,025	717,718
FY98	06/15/98 TO 06/21/98	7	114590170	115292890	5,270,400	752,914
FY98	06/22/98 TO 06/30/98	9	115292890	115198490	6,792,000	754,667
FY98	07/01/98 TO 07/05/98	5	116198490	116635640	3,278,625	655,725
FY98	07/06/98 TO 07/12/98	7	116635640	117215750	4,350,825	621,546
FY98	07/13/98 TO 07/19/98	7	117215750	117888460	5,045,325	720,761
FY98	07/20/98 TO 07/31/98	12	117888460	119002540	8,355,600	696,300
FY98	08/01/98 TO 08/10/98	10	119002540	120282160	9,597,150	959,715
FY98	08/11/98 TO 08/16/98	6	120282160	120827320	4,088,700	681,450
FY98	08/17/98 TO 08/23/98	7	120827320	121665770	6,288,375	898,339
FY98	08/24/98 TO 08/31/98	8	121665770	122652400	7,399,725	924,966
FY98	09/01/98 TO 09/07/98	7	122652400	123360900	5,313,750	759,107
FY98	09/08/98 TO 09/13/98	6	123360900	123936280	4,315,350	719,225
FY98	09/14/98 TO 09/20/98	7	123936280	124751770	6,116,175	873,739
FY98	09/21/98 TO 09/30/98	10	124751770	125652640	6,756,525	675,653
FY98	Total Year	365			244,343,775	669,435

**Total Usage & Calculated Average Daily Usage:
FY98 through FY00**

Water Usage

Year	Dates	# Days	BEGINNING METER NUMBER	ENDING METER NUMBER	GALLONS WATER USED	Average Daily Usage
FY99	10/01/98 TO 10/12/98	12	125652640	126881980	9,220,050	768,338
FY99	10/13/98 TO 10/18/98	6	126881980	127469200	4,404,150	734,025
FY99	10/19/98 TO 10/25/98	7	127469200	128214300	5,588,250	798,321
FY99	10/26/98 TO 10/31/98	6	128214300	128969240	5,662,050	943,675
FY99	11/01/98 TO 11/08/98	8	128969240	129754310	5,888,025	736,003
FY99	11/09/98 TO 11/15/98	7	129754310	130444610	5,177,250	739,607
FY99	11/16/98 TO 11/22/98	7	130444610	131153090	5,313,600	759,086
FY99	11/23/98 TO 11/30/98	8	131153090	132049110	6,720,150	840,019
FY99	12/01/98 TO 12/06/98	6	132049110	132600220	4,133,325	688,888
FY99	12/07/98 TO 12/13/98	7	132600220	133287200	5,152,350	736,050
FY99	12/14/98 TO 12/20/98	7	133287200	134197810	6,829,575	975,654
FY99	12/21/98 TO 12/27/98	7	134197810	135077690	6,595,100	942,729
FY99	12/28/98 TO 12/31/98	4	135077690	135325610	1,859,400	464,850
FY99	01/01/99 TO 01/10/99	10	135325610	136103620	5,835,075	583,508
FY99	01/11/99 TO 01/17/99	7	136103620	136725230	4,662,075	666,011
FY99	01/18/99 TO 01/24/99	7	136725230	137388470	4,974,300	710,614
FY99	01/25/99 TO 01/31/99	7	137388470	137974930	4,398,450	628,350
FY99	02/01/99 TO 02/07/99	7	137974930	138643510	5,014,350	716,336
FY99	02/08/99 TO 02/14/99	7	138643510	139250920	4,555,575	650,796
FY99	02/15/99 TO 02/21/99	7	139250920	139709110	3,436,425	490,918
FY99	02/22/99 TO 02/28/99	7	139709110	140260210	4,133,250	590,464
FY99	03/01/99 TO 03/07/99	7	140260210	140813360	4,148,625	592,661
FY99	03/08/99 TO 03/14/99	7	140813360	141447700	4,757,550	679,650
FY99	03/15/99 TO 03/21/99	7	141447700	142032240	4,384,050	626,293
FY99	03/22/99 TO 03/31/99	10	142032240	142846510	6,107,025	610,703
FY99	04/01/99 TO 04/11/99	11	142846510	143729170	6,619,950	601,814
FY99	04/12/99 TO 04/18/99	7	143729170	144257520	3,962,625	566,089
FY99	04/19/99 TO 04/30/99	12	144257520	145138500	6,607,350	550,613
FY99	05/01/99 TO 05/09/99	9	145138500	146062940	6,933,300	770,367
FY99	05/10/99 TO 05/16/99	7	146062940	146853840	5,931,750	847,393
FY99	05/17/99 TO 05/23/99	7	146853840	147579020	5,438,850	776,979
FY99	05/24/99 TO 05/31/99	8	147579020	148459120	6,600,750	825,094
FY99	06/01/99 TO 06/06/99	6	148459120	149005470	4,097,625	682,938
FY99	06/07/99 TO 06/13/99	7	149005470	149681100	5,067,225	723,889
FY99	06/14/99 TO 06/20/99	7	149681100	150410710	5,472,075	781,725
FY99	06/21/99 TO 06/30/99	10	150410710	151212860	6,016,125	601,613
FY99	07/01/99 TO 07/11/99	11	151212860	152470350	9,431,175	857,380
FY99	07/12/99 TO 07/18/99	7	152470350	153243040	5,795,175	827,882
FY99	07/19/99 TO 07/25/99	7	153243040	153661420	3,137,850	448,264
FY99	07/26/99 TO 07/31/99	6	153661420	153780120	890,250	148,375
FY99	08/01/99 TO 08/09/99	9	153780120	154724530	7,083,075	787,008
FY99	08/10/99 TO 08/15/99	6	154724530	155358120	4,751,925	791,988
FY99	08/16/99 TO 08/22/99	7	155358120	156200070	6,314,625	902,089
FY99	08/23/99 TO 08/31/99	9	156200070	157027750	6,207,600	689,733
FY99	09/01/99 TO 09/30/99	30	157027750	160119600	23,188,875	772,963
FY99	Total Year	365			258,502,200	708,225

**Total Usage & Calculated Average Daily Usage:
FY98 through FY00**

Water Usage

Year	Dates	# Days	BEGINNING METER NUMBER	ENDING METER NUMBER	GALLONS WATER USED	Average Daily Usage
FY00	10/01/99 TO 10/12/99	11	160119600	161656750	11,528,625	1,048,057
FY00	10/12/99 TO 10/17/99	6	161656750	162036023	2,844,548	474,091
FY00	10/18/99 TO 10/24/99	7	162036023	162409582	2,801,693	400,242
FY00	10/25/99 TO 10/31/99	7	162409582	162801731	2,941,118	420,160
FY00	11/01/99 TO 11/08/99	8	162801731	163435640	4,754,318	594,290
FY00	11/09/99 TO 11/14/99	6	163435640	164014530	4,341,675	723,613
FY00	11/15/99 TO 11/21/99	7	164014530	164830190	6,117,450	873,921
FY00	11/22/99 TO 11/30/99	9	164830190	165599390	5,769,000	641,000
FY00	12/01/99 TO 12/05/99	5	165599390	166031110	3,237,900	647,580
FY00	12/06/99 TO 12/12/99	7	166031110	166707820	5,075,325	725,046
FY00	12/13/99 TO 12/19/99	7	166707820	167396010	5,161,425	737,346
FY00	12/20/99 TO 12/27/99	8	167396010	168201430	6,040,650	755,081
FY00	12/28/99 TO 12/31/99	4	168201430	168569140	2,757,825	689,456
FY00	01/01/00 TO 01/09/00	9	168569140	169938380	10,269,300	1,141,033
FY00	01/10/00 TO 01/16/00	7	169938380	170667840	5,470,950	781,564
FY00	01/17/00 TO 01/23/00	7	170667840	171402650	5,511,075	787,296
FY00	01/24/00 TO 01/31/00	8	171402650	172061890	4,944,300	618,038
FY00	02/01/00 TO 02/06/00	6	172061890	172691000	4,718,325	786,388
FY00	02/07/00 TO 02/13/00	7	172691000	173609630	6,889,725	984,246
FY00	02/14/00 TO 02/20/00	7	173609630	174444620	6,262,425	894,632
FY00	02/21/00 TO 02/29/00	9	174444620	175324300	6,597,600	733,067
FY00	03/01/00 TO 03/12/00	12	175324300	176434150	8,323,875	693,656
FY00	03/13/00 TO 03/19/00	7	176434150	177071100	4,777,125	682,446
FY00	03/20/00 TO 03/26/00	7	177071100	177722770	4,887,525	698,218
FY00	03/27/00 TO 03/31/00	5	177722770	178193910	3,533,550	706,710
FY00	04/01/00 TO 04/09/00	9	178193910	179036430	6,318,900	702,100
FY00	04/10/00 TO 04/16/00	7	179036430	179676830	4,803,000	686,143
FY00	04/17/00 TO 04/23/00	7	179676830	180238320	4,211,175	601,596
FY00	04/24/00 TO 04/30/00	7	180238320	181026580	5,911,950	844,564
FY00	05/01/00 TO 05/07/00	7	181026580	182067565	7,807,388	1,115,341
FY00	05/08/00 TO 05/14/00	7	182067565	183254690	8,903,438	1,271,920
FY00	05/15/00 TO 05/21/00	7	183254690	184173090	6,888,000	984,000
FY00	05/22/00 TO 05/31/00	10	184173090	185357240	8,881,125	888,113
FY00	06/01/00 TO 06/11/00	11	185357240	186600840	9,327,000	847,909
FY00	06/12/00 TO 06/18/00	7	186600840	187326990	5,446,125	778,018
FY00	06/19/00 TO 06/25/00	7	187326990	188166950	6,299,700	899,957
FY00	06/26/00 TO 06/30/00	5	188166950	188664150	3,729,000	745,800
FY00	07/01/00 TO 07/09/00	9	188664150	189927730	9,476,850	1,052,983
FY00	07/10/00 TO 07/16/00	7	189927730	190623970	5,221,800	745,971
FY00	07/17/00 TO 07/23/00	7	190623970	190826570	1,519,500	217,071
FY00	07/24/00 TO 07/31/00	8	190826570	191484850	4,937,100	617,138
FY00	08/01/00 TO 08/31/00	31	191484850	194685630	24,005,850	774,382
FY00	09/01/00 TO 09/30/00	30	194685630	197393440	20,308,575	676,953
FY00	Total Year	366			279,553,800	763,808

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Cumb. 4-5: [Ref – PWSB's Response to Cumb. 2-16] Because the Commission approved the use of certain factors in a prior case, does that mean the Commission (even if comprised of the same members) must approve exactly the same factors in this case as it approved (or didn't disapprove) in the prior case? If affirmative, please site the specific law or regulation supporting this belief. If PWSB believes this is the case in law or regulation, please disregard the following Information Requests (IRs). If PWSB believes that this is not necessarily the case in law or regulation, please respond to the following IRs. What is the source of each of the PEAK HOUR Demand Factors used on Sch. 2.2 (and carried over from the prior case). If any assumptions or calculations were used to derive each factor, provide a detailed discussion of any assumptions and the computations used to derive each factor. Provide your justification for using each demand factor. Were any of these factors derived from data and analysis specific to the PWSB system or are they applicable to other water systems or general industry estimates? Have you performed or are you aware of any study or analysis that was, or could be, used to derive demand factors based on the specific demands placed on PWSB's system? If affirmative, please provide a reference for each.

Response: Please see response to Cumb. 4-4.

Prepared by: C. Woodcock

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Cumb. 4-6: [Ref – PWSB's Response to Cumb. 2-17] Please reconcile the differences in Retail Sales and Wholesale Sales shown on your response to Cumb. 2-17 and the corresponding sales shown on Schedule 2.1 (page 1 of 1) of your Exhibits. Which are the "correct" numbers that should be used by PWSB in this case and by you to develop the rate year revenue requirements and the proposed rates? As a result of your responses to the first part of this IR will it be appropriate/necessary to alter any of the numbers in your schedules or rate model? If affirmative, please explain in detail.

Response: The values presented in the response to Cumb 2-17 are developed for PWSB's Annual Reports to the Commission. They represent the sales within the fiscal year. The data used for the development of the sales on Woodcock Schedule 2.1 are based on billings within the fiscal year. For example, the billings for FY 2014 (Sch. 2.1) would include billings in June for sales in May, but would not include usage in June. The June usage is billed in July, so it appears in the next fiscal year. However, the values presented in the response to Cumb. 2-17 would include the June usage. The numbers used on Schedule 2.1 were used to develop the rate year revenue requirement. The numbers in Cumb. 2-17 were used in the rate model for the development of things such as allocation factors and unaccounted for water. It is not necessary to change the numbers in my rate model.

Prepared by: C. Woodcock

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Cumb. 4-7: [Ref – PWSB's Response to Cumb. 2-18] If all of IFR funded projects were for distribution facilities only, would it be appropriate to allocate nearly 7% of those costs to the wholesale customer in Cumberland? If that were the case, wouldn't such a 7% allocation to Cumberland's wholesale customer be very significant? Or, even a few percent, for that matter? Your response to Cumb. 2-18 seems to indicate that there are significant general benefit facilities (transmission mains, sources of supply, treatment plants, etc.) that are at times funded by IFR funds and that benefit the one wholesale customer. In each of the past 10 years what amounts have been withdrawn from the IFR account to pay for any PWSB capital improvements? In each of those same 10 years what general benefit facilities have been installed and paid for each year with IFR funds (specify such annual amounts) that provide benefits to the wholesale customer in Cumberland? In each of the next 5 years what amounts are expected to be withdrawn from the IFR account to pay for any PWSB capital improvements? In those same 5 years what general benefit facilities are expected to be installed and paid for in each of those years with IFR funds (specify such annual amounts) that provide benefits to the wholesale customer in Cumberland?

Response: The question – "If all of IFR funded projects were for distribution facilities only, would it be appropriate to allocate nearly 7% of those costs to the wholesale customer in Cumberland?" – does not provide sufficient information to respond. For example, what period is covered by the question: 1 year, 10 years, 25 years? This makes it impossible to answer the next two questions – "If that were the case, wouldn't such a 7% allocation to Cumberland's wholesale customer be very significant? Or, even a few percent, for that matter?" In addition, the term "very significant" has no context in this question. Significance must be evaluated in the context of something else.

The question next states that: "Your response to Cumb. 2-18 seems to indicate that there are significant general benefit facilities (transmission mains, sources of supply, treatment plants, etc.) that are at times funded by IFR funds and that benefit the one wholesale

customer." That is not what my response to Cumb. 2-18 stated. The full request and response was as follows:

"Cumb. 2-18: [Ref. – Testimony Page 8, lines 20-22, and Sch. 3.0, Page 4 of 4] About 90% of IFR Capital Expenses are allocated to Base, Max. Day and Peak Hour cost components, a significant portion of which are later allocated to the wholesale class (Cumberland). What, if any, benefit does this wholesale customer receive from the IFR program? Has the transmission main (or mains) serving Cumberland been replaced or renewed and paid for with IFR funds up to this point in time or will it be over the next 5 years? Overall, what percentage of IFR funds have been used to repair/replace distribution mains versus transmission mains? What, if any, benefit do wholesale customer receive from distribution mains?

Response: I disagree with the question's premise that "a significant portion" of the base, maximum day and peak hour costs "are later allocated to the wholesale class". In fact, only 6.7% of the base costs are allocated to the wholesale class, which accounts for more than 7% of the total sales. Only 3.5% of the maximum day and 0.1% of the peak hour costs are allocated to the wholesale class. These values (6.7%, 3.5% and 0.1%) can hardly be considered "significant".

The Commission has historically allowed for the allocation of IFR costs (and debt service costs) based on plant investment. This helps smooth out fluctuations in rates that would otherwise occur if costs were allocated based on annual expense projections. For example, if Pawtucket Water planned to spend all its IFR funds on meters in the rate year, the full cost would be assigned to the customer service charges, resulting in a massive increase for the rate year. If the next year the IFR was to all be spent on a pipe to Cumberland, it would then drop the service charges and significantly increase the charges to Cumberland. Such rate discontinuity is not desirable; accordingly, asset values are often used to smooth out these types of spikes.

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Prepared by: C. Woodcock"

In this response I never stated that there are "significant general benefit facilities (transmission mains, sources of supply, treatment plants, etc.) that are at times funded by IFR funds and that benefit the one wholesale customer." Further, I stand by response to Cumberland 2-18 and once again reiterate that the Commission has historically allowed for the allocation of IFR costs (and debt service costs) based on plant investment. This helps smooth out fluctuations in rates that would otherwise occur if costs were allocated based on annual expense projections.

Regarding the past and future IFR funding, please see the response to Cumb. 3-12 and the attached schedule that shows the amounts withdrawn from IFR to pay for capital improvements. The PWSB has not examined every project over the past 10 years, plus the next five years, to try to determine the "benefit" to Cumberland. The PWSB does not believe there is any need or benefit to spend time or money on such an examination, as IFR costs are allocated based on the allocation of assets. (See Cumb 2-18) Based on the data provided in previous responses to Cumberland, and a review of the PWSB's PUC Dockets over the past ten years, Cumberland is capable of attempting such a judgement if it believes that such an exercise has any merit. Please also see the PWSB's response to Cumb. 4-14.

Prepared by: C. Woodcock

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Cumb. 4-8: [Ref – PWSB's Response to Cumb. 2-20] Please provide a modified Schedule Cumb. 2-20 that includes the proposed revenues from the 2 step increases

Response: Please see the attachment to Cumb. 3-20 - Debt Service Fund. As set forth in this schedule the PWSB will deposit the proposed revenues in the Debt Service Account, not the Debt Stabilization Account.

Prepared by: R. Benson

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Cumb. 4-9: [Ref – PWSB's Response to Cumb. 2-21] The responses we received to our second set of discovery did not include a response to Cumb. 2-21. Please provide a response to that IR with your responses to this fourth set of discovery.

Response: This response was provided on May 22, 2015.

Prepared by: C. Woodcock

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Cumb. 4-10: [Ref – PWSB's Response to Cumb. 2-22] The responses we received to our second set of discovery did not include a response to Cumb. 2-22. Please provide a response to that IR with your responses to this fourth set of discovery.

Response: This response was provided on May 22, 2015.

Prepared by: C. Woodcock

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Cumb. 4-11: [Ref – PWSB's Response to Cumb. 2-20] Please provide all calculations, assumptions and supporting documents used to derive the revised estimate for the rate year cost of the DBO Operating contract. Does your revised estimate of the correct increase of this expense to \$71,360 result in a decrease in rate year revenue requirements of \$159,163? If you disagree, please explain in detail your reason(s) for disagreeing.

Response: Please see the revised schedule submitted with the response to Cumb. 3-26.

Prepared by: R. Benson

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Cumb. 4-12: [Ref – PWSB's Response to Cumb. 2-24] Because the Commission approved the use of a particular method to estimate future inflation levels in a prior case, does that mean the Commission (even if comprised of the same members) must approve exactly the same method in this case as it approved (or didn't disapprove) in the prior case? If affirmative, please site the specific law or regulation supporting this belief. If PWSB believes this is the case in law or regulation, please disregard the following Information Requests (IRs). If PWSB believes that this is not necessarily the case in law or regulation, please respond to the following IRs. Please explain in detail why you believe the GDP deflator is a better indicator of inflation for the costs to which it was applied (in this case and the prior one) than use of a Consumer Price Index (CPI) to determine the most appropriate inflation rate? Same question but the substitute Producer Price Index (PPI) for the CPI index.

Response: The first part of this request calls for a legal conclusion, and the PWSB's legal counsel responds as follows:

Whether a prior Commission Ruling must be upheld in a subsequent docket depends on the applicable facts and circumstances. Three primary judicial doctrines require varying degrees of deference to earlier judicial decisions. The doctrine of stare decisis dictates that courts should adopt the reasoning of earlier judicial decisions if the same points arise again in litigation. This principle is not absolute, however, and courts may abandon previously adopted rules of law under the right circumstances. State v. Werner, 615 A.2d 1010 (R.I.1992). Collateral estoppel is a more rigid doctrine, in that it "bars litigation of an issue when that issue has been determined by a valid and final judgment." DeCiantis v. State, 666 A.2d 410 (R.I.1995). The doctrine of res judicata has an even greater preclusive effect, in that "it makes a prior judgment in a civil action between the same parties conclusive with regard to any issues that were litigated in the prior action, or, that could have been presented and litigated therein." ElGabri v. Lekas, 681 A.2d 271 (R.I.1996). Thus, "[a] party defeated in one action cannot maintain a second action based on a ground which could properly have been, but was not, set forth and relied upon in the former action." Id.

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There is also the Doctrine of Administrative Finality, which differs from the rigid doctrines of collateral estoppel and res judicata, and is more akin to the doctrine of stare decisis. The Doctrine of Administrative Finality provides for a qualified and limited preclusion rather than an absolute bar. In *Johnston Ambulatory Surgical Associates Ltd. v. Nolan*, 755 A.2d 799 (RI 2000), the Rhode Island Supreme Court held that: "when an administrative agency receives an application for relief and denies it, a subsequent application for the same relief may not be granted absent a showing of a change in material circumstances during the time between the two applications. This rule applies as long as the outcome sought in each application is substantially similar, even if the two applications each rely on different legal theories. Without waiving any rights the PWSB may have under these doctrines, it responds to the questions posed herein below.

Prepared by: Joseph A. Keough Jr., Esquire

As noted in the response to Cumb 2-24, we have agreed with the Division's recommendation to use the GDP. In Docket 3942, Thomas Catlin testified on behalf of the Division as follows: "I am proposing to utilize the Gross Domestic Product Price Index (GDP-PI) to account for general inflation. The GDP-PI is a broad based measure of inflation or price changes that is based on all of the goods and services that make up the U.S gross domestic product. As such, the GDP-PI is more representative of the types of costs to which a general price escalator is being applied in this proceeding." (See Catlin Direct Testimony, pp. 16-17) We support this testimony.

We have made no representation regarding the Producer Price Index and have not examined this matter. As such, we are unable to respond.

Prepared by: C. Woodcock

Cumb. 4-13: [Ref – PWSB's Response to Cumb. 2-31] Do any of PWSB's witnesses disagree with the following general statements about the national and regional (southern New England) economic conditions during the years indicated:

- In 2008 and 2009 the national and regional economies experienced very significant, if not major recessions. These economic conditions are characterized by low or no growth in GDP, high unemployment, decreasing income, decreasing stock values, and low consumer confidence.
- Between 2010 and 2013 the national and regional economies improved gradually, but at historically slow rates of recovery.
- Starting In 2013/2014 the national and regional economies have improved significantly and continue to improve to the present time, albeit at relatively modest rates. These economic conditions are characterized by moderate growth in GDP, low unemployment, flat or slow growth in income, increasing stock values, and improving consumer confidence.

If any of PWSB's witnesses disagree with these general descriptions of the national and regional economies since 2007, please state in detail their reason(s) for disagreeing. Do any of PWSB's witnesses disagree that domestic water consumption is likely to increase during periods of good or strong economic growth following periods of weak or no economic growth, all else being equal? If any of PWSB's witnesses disagree, please state in detail their reason(s) for disagreeing. Do any of PWSB's witnesses disagree that commercial and industrial water consumption is likely to increase during periods of good or strong economic growth following periods of weak or no economic growth, all else being equal? If any of PWSB's witnesses disagree, please state in detail their reason(s) for disagreeing.

Response: It is very difficult for the PWSB's witness to agree or disagree with the general statements in the arrowed paragraphs as they do not set forth the foundation for the statements. Further, the statements use

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relative terms such as "significant" and "major", However, Mr. Woodcock responds as follows:

Attached please find a number of charts prepared by the Federal Reserve Bank of Boston for various economic indicators in the State of Rhode Island over the past ten years. Rather than accepting the broad and undefined statements included in the data request, I believe these charts present quantifiable indications of various economic conditions as developed by the US Bureau of Labor Statistics.

Looking at the Index of Economic Activity, it indicates economic recovery more quickly than Cumberland suggests and sustaining that recovery through 2015. Indicators such as average hourly earnings, residential electric sales, commercial electric sales, personal income, and total construction contracts do not appear to demonstrate the trends suggested by Cumberland. While payroll employment certainly dropped in the 2008-09 timeframe, it recovered more quickly than the Cumberland characterizations and maintained that level of change from 2011 to present.

I do disagree with the blanket statement that "domestic water consumption is likely to increase during periods of good or strong economic growth following periods of weak or no economic growth." The Federal Reserve Bank of Boston does not produce charts with water use, but there are three charts attached that present changes in residential, commercial and industrial electricity sales over the past ten years. I do not believe these analysis support Cumberland's claim.

Cumberland has suggested that the period 2010-13 demonstrated a gradually improved economic condition, followed by significant economic growth in 2013-14. As shown on my Schedule 2.1 there was not the increase in water sales that Cumberland suggests. In fact, retail sales dropped in 2010, 2012 and 2013 and remained essentially flat in 2014. Fiscal year 2011 was a dryer than normal period, likely resulting in the increased sales that year.

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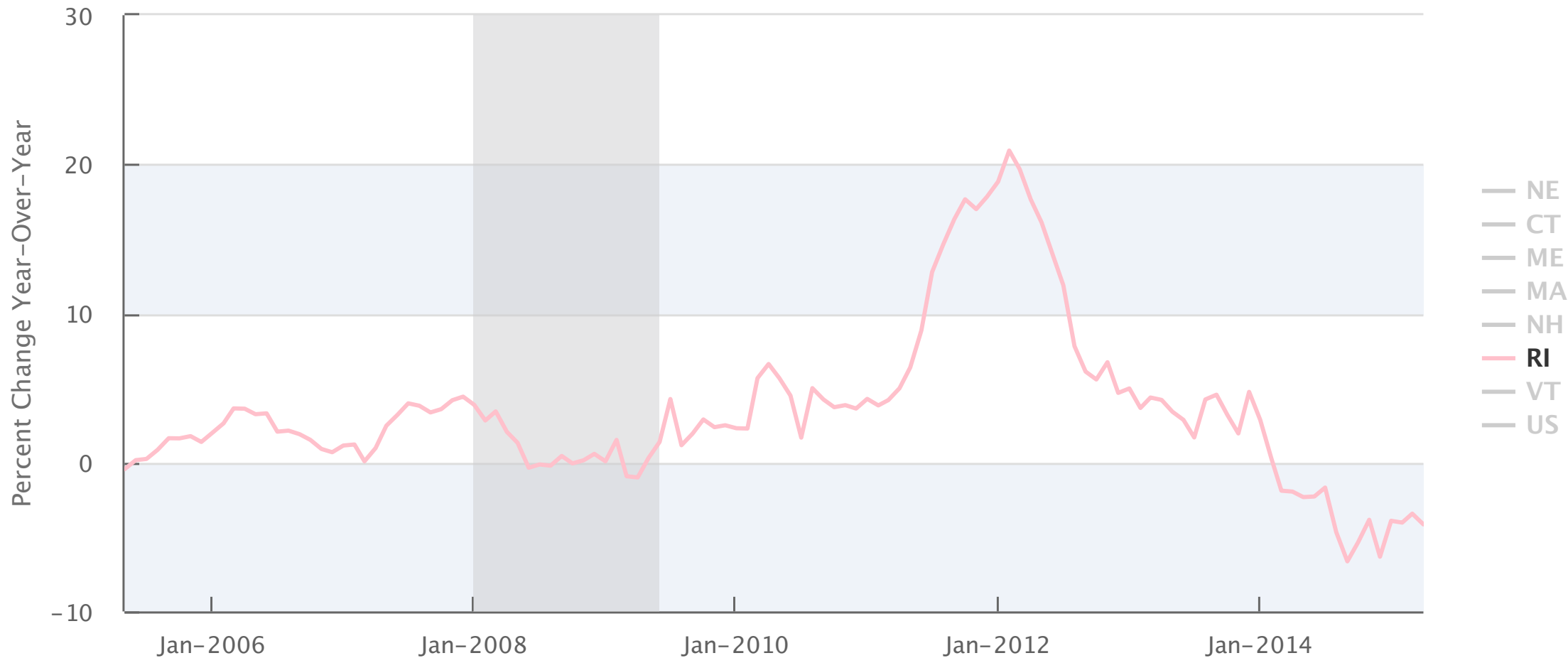
Except for the dry, 2011 year, water sales for the PWSB have dropped every year since 2009. There was not the "expected increase" that Cumberland has suggested.

Lastly, there are many factors that impact water sales. Weather is a primary cause (as evidenced by sales in 2011). Despite the significant economic improvements in recent years suggested by Cumberland, water sales in California have plummeted this past year.

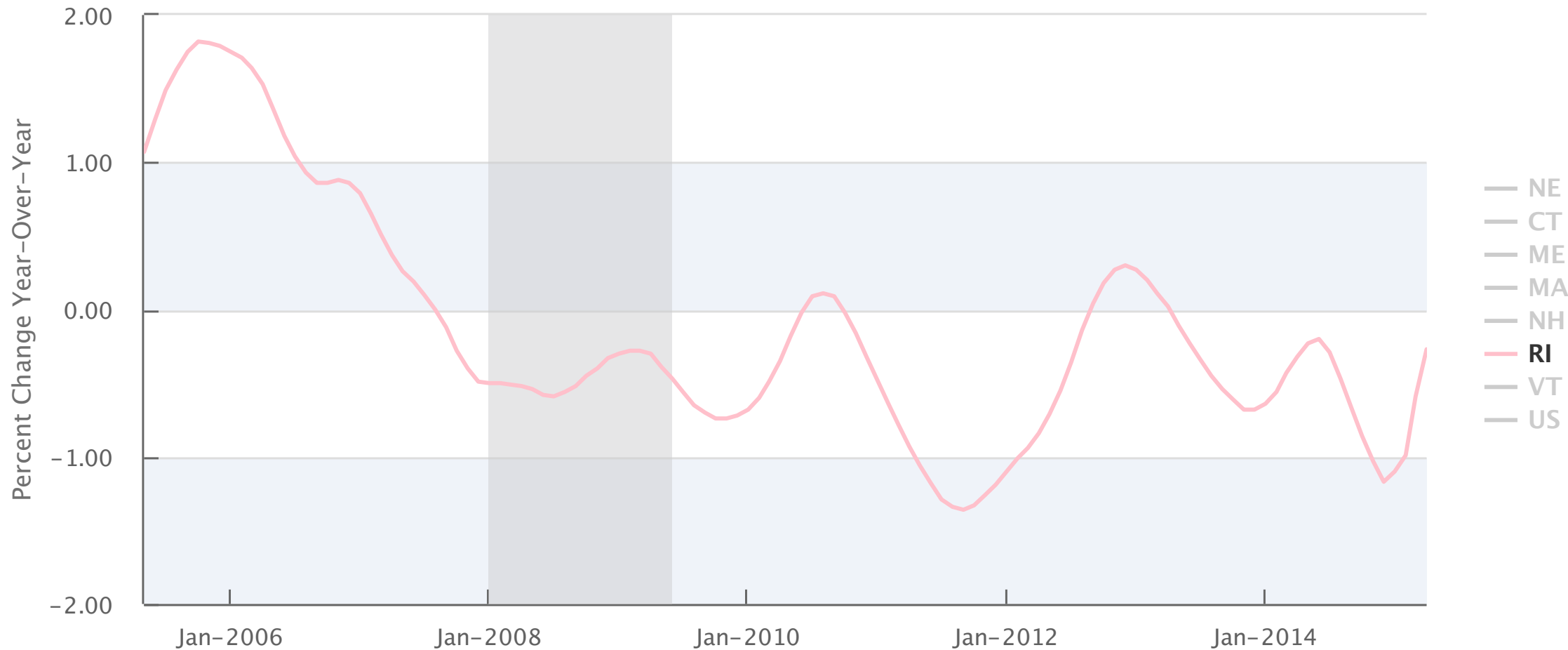
Based on the above, I do not agree with Cumberland's assertions regarding increases in water use corresponding to economic growth.

Prepared by: C. Woodcock

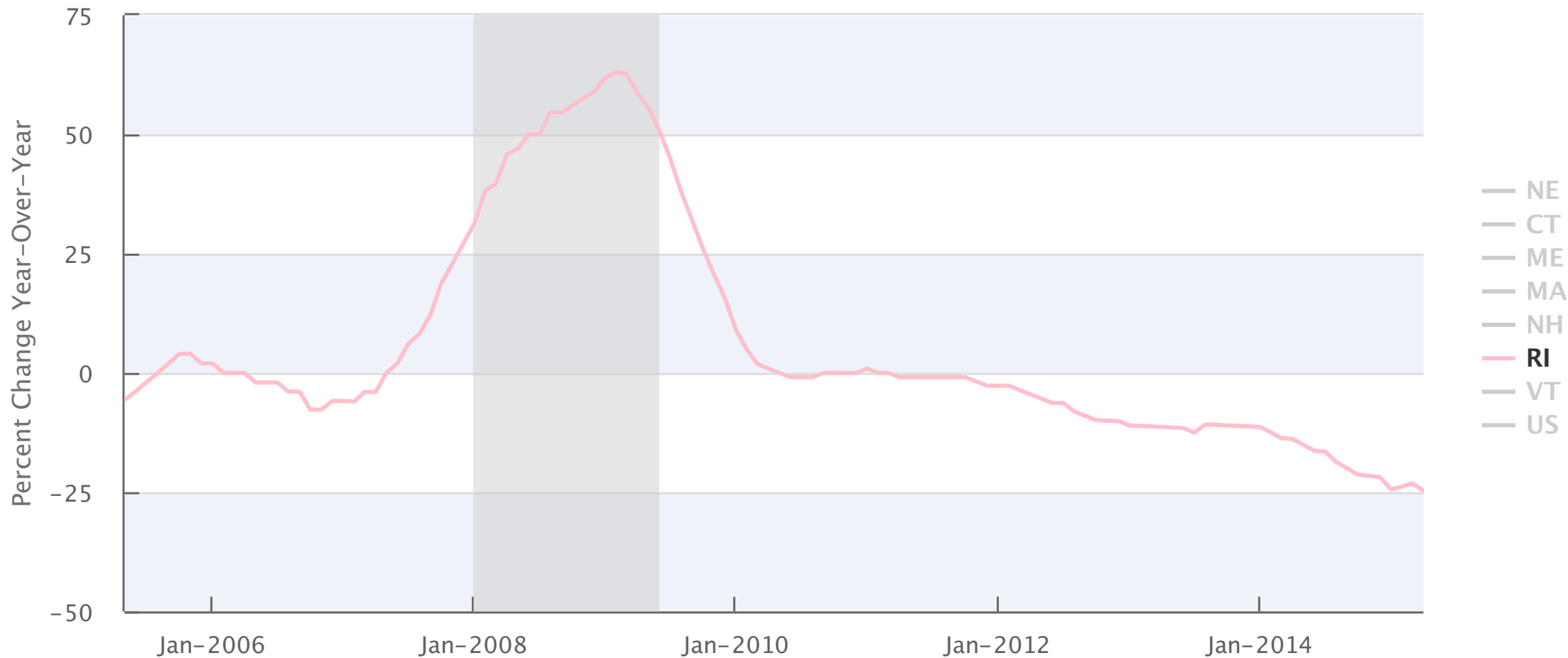
Average Hourly Earnings



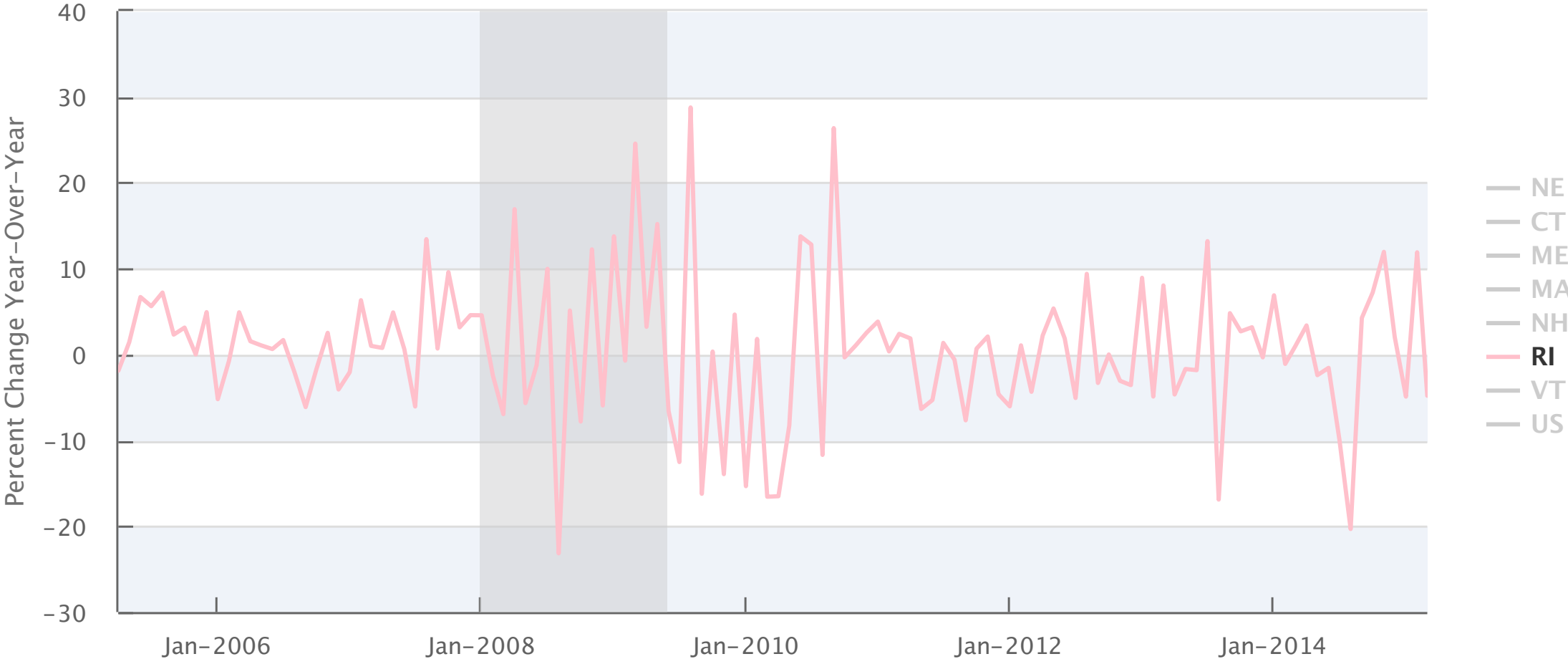
Civilian Labor Force



Civilian Unemployment Rate

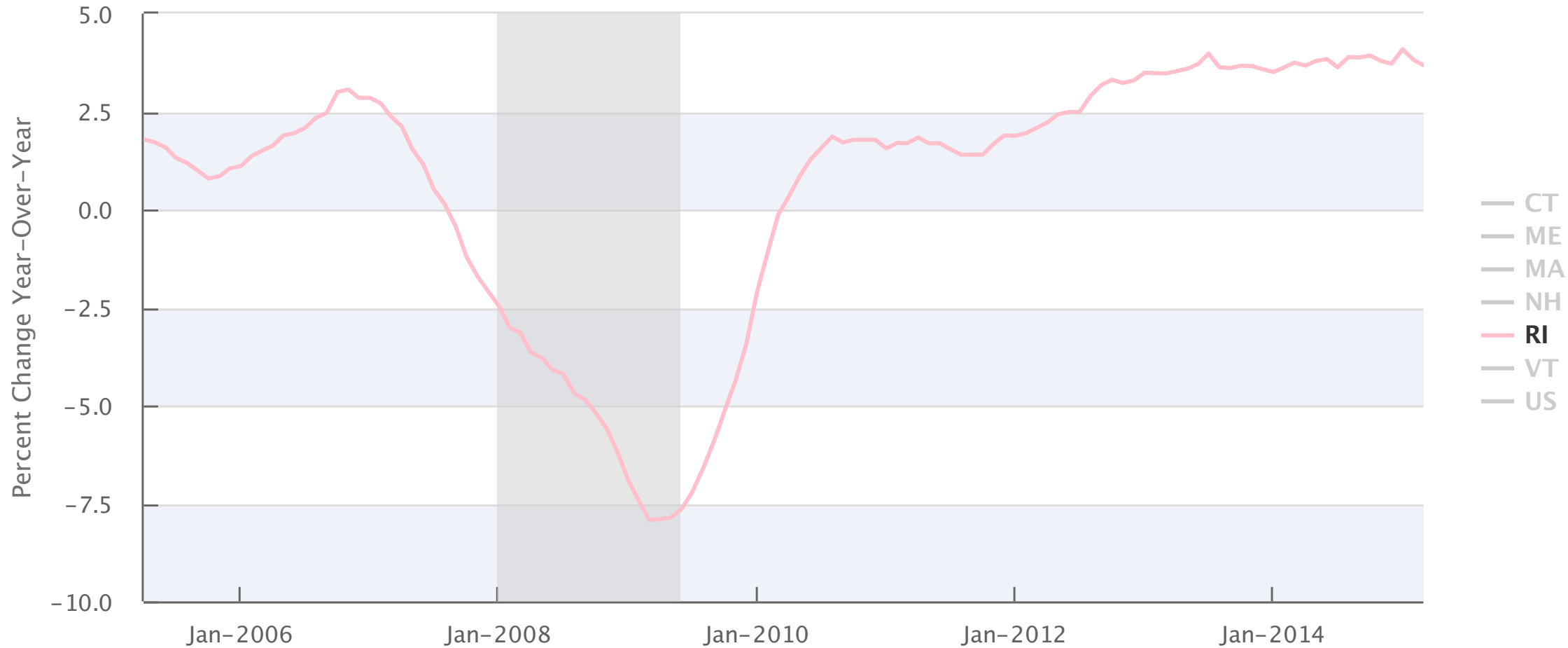


Commercial Electricity Sales

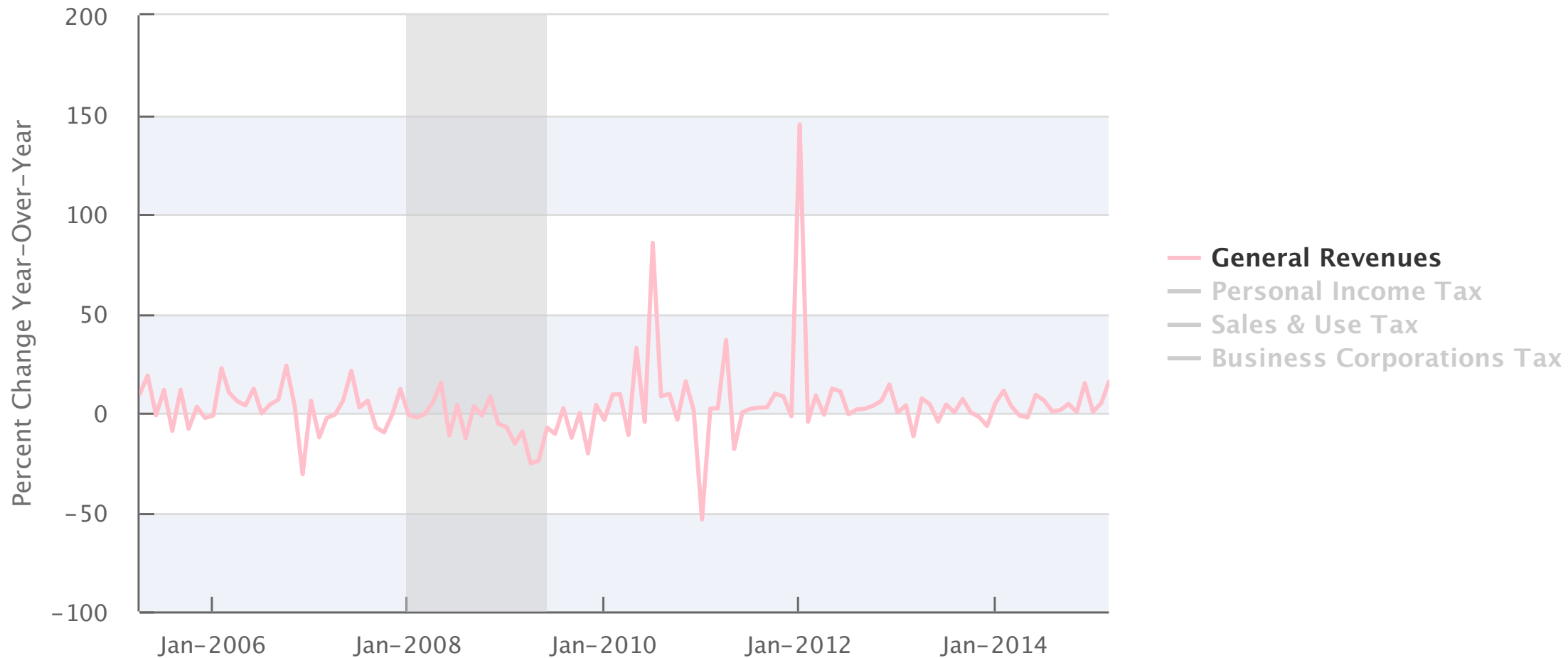


Source: U.S. Department of Energy, Energy Information Administration / New England Economic Indicators

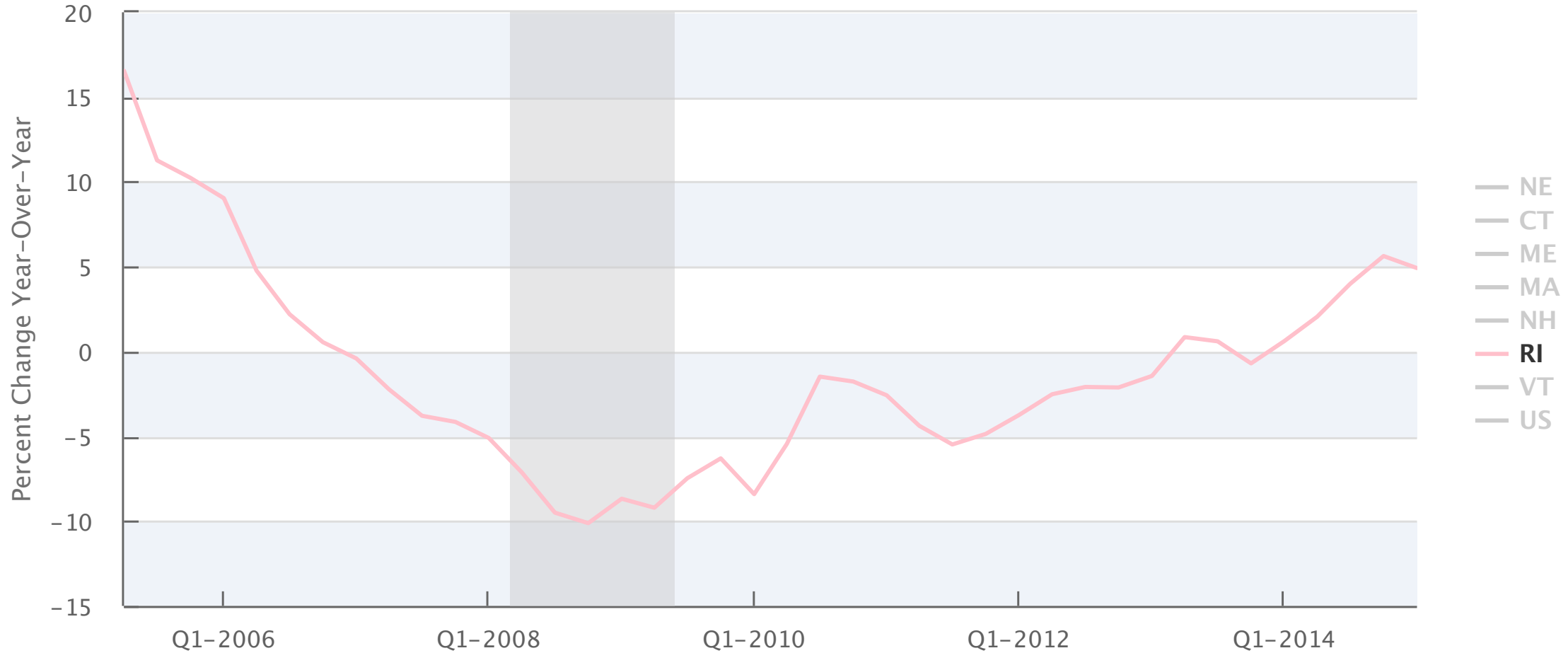
Economic Activity Index



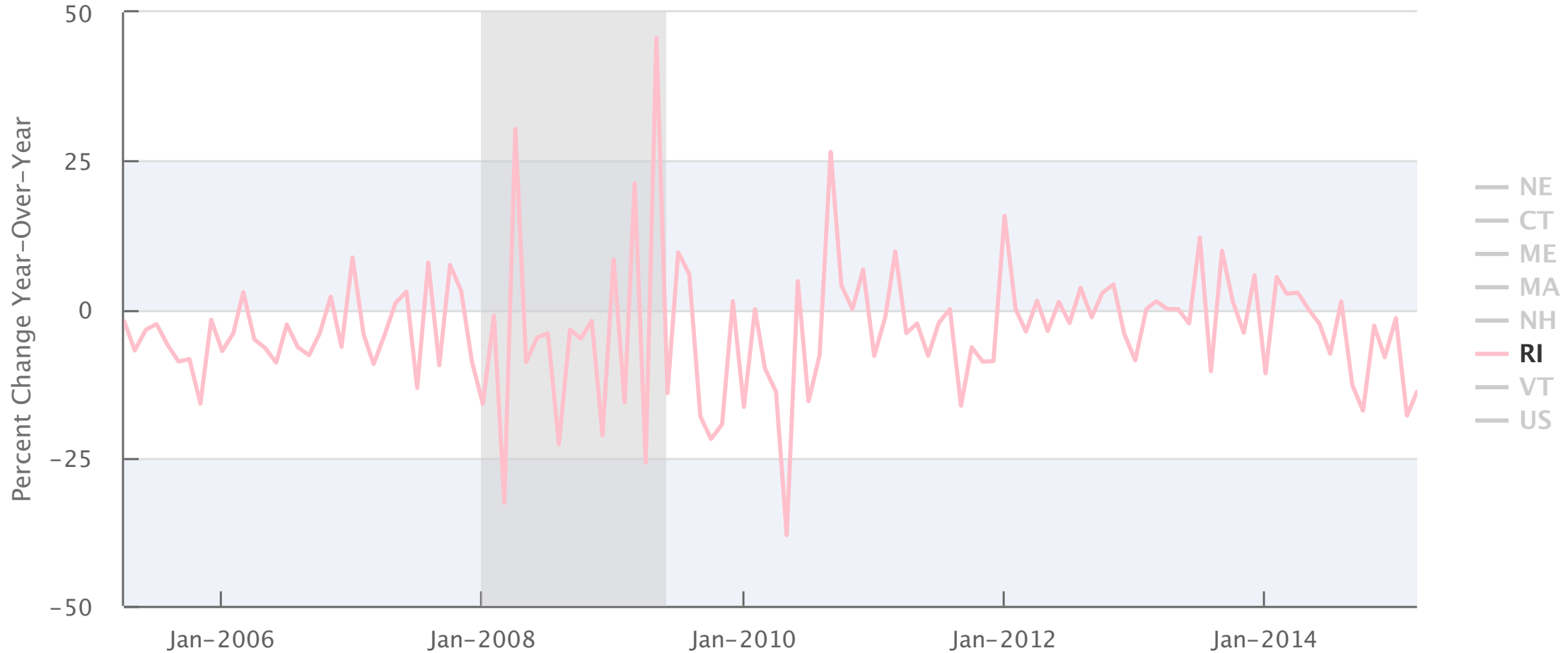
General Revenues



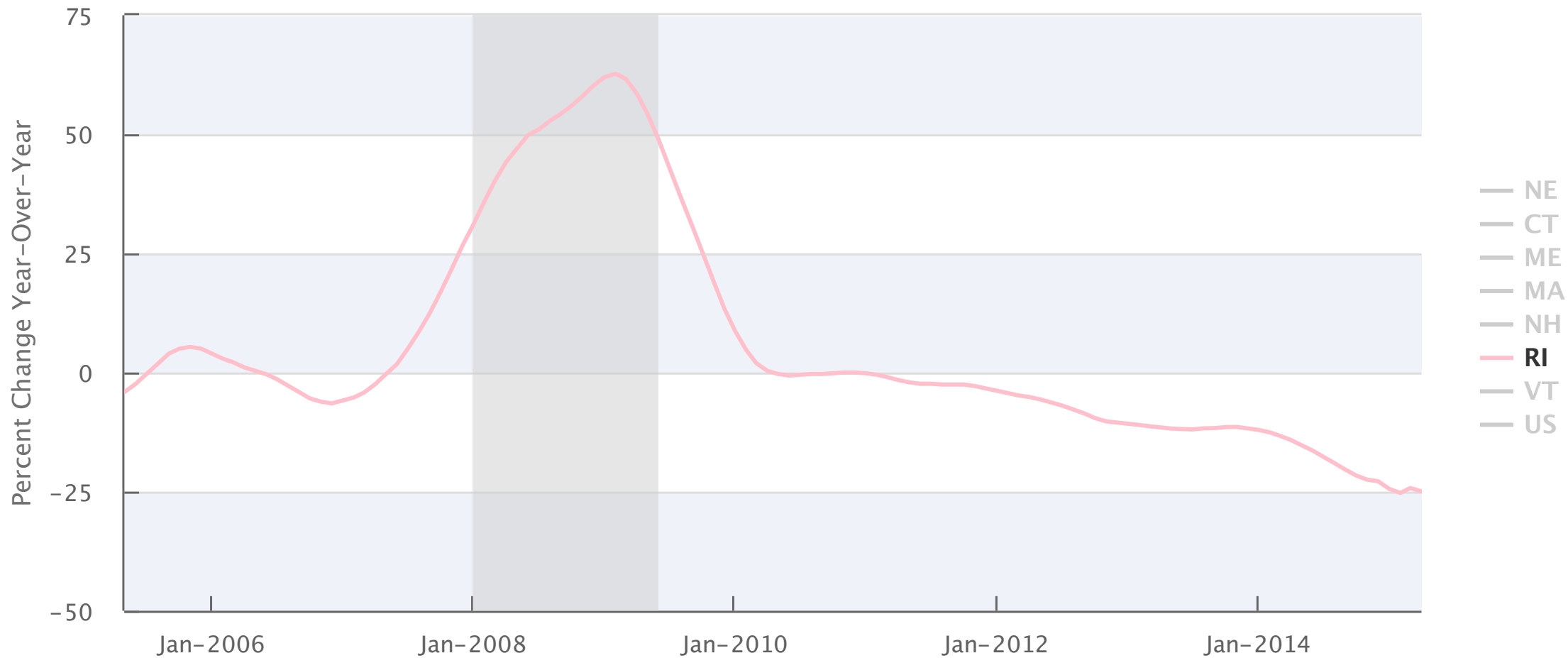
Home Price Index



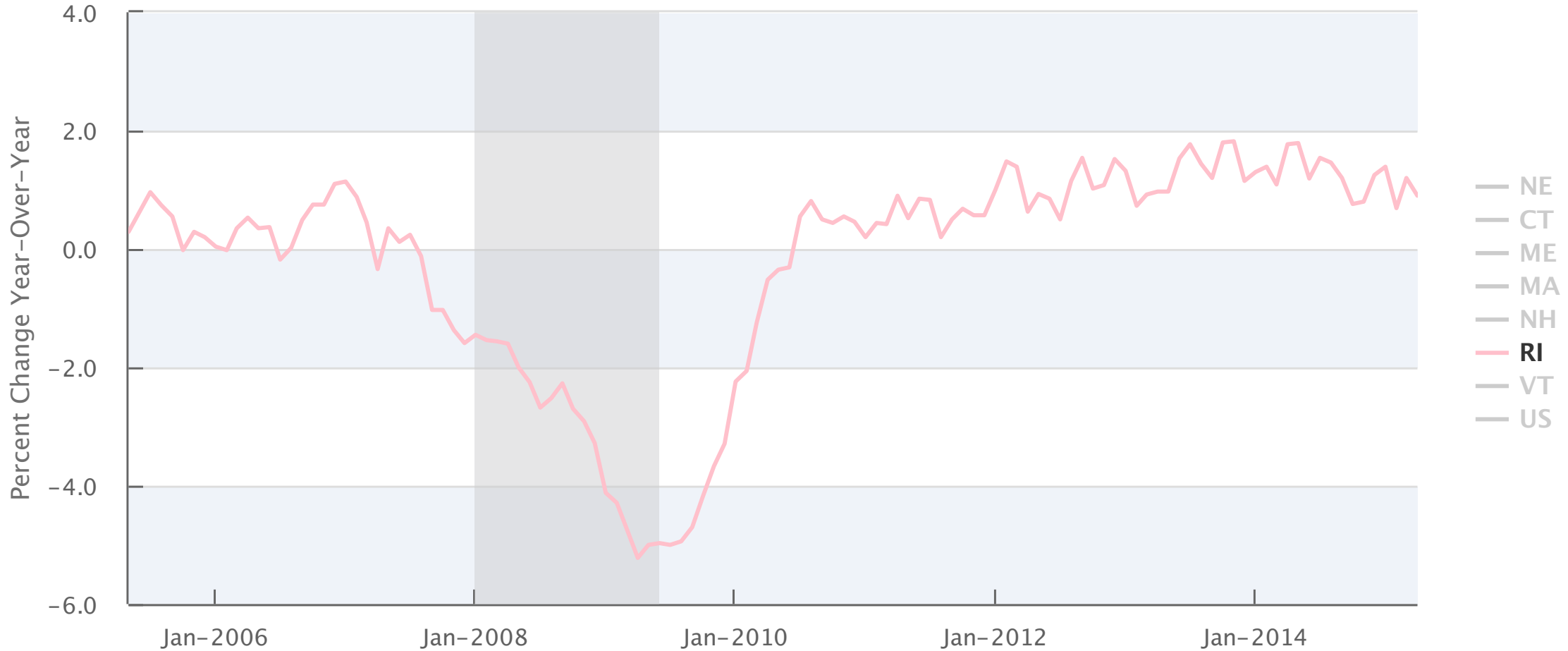
Industrail Electricity Sales



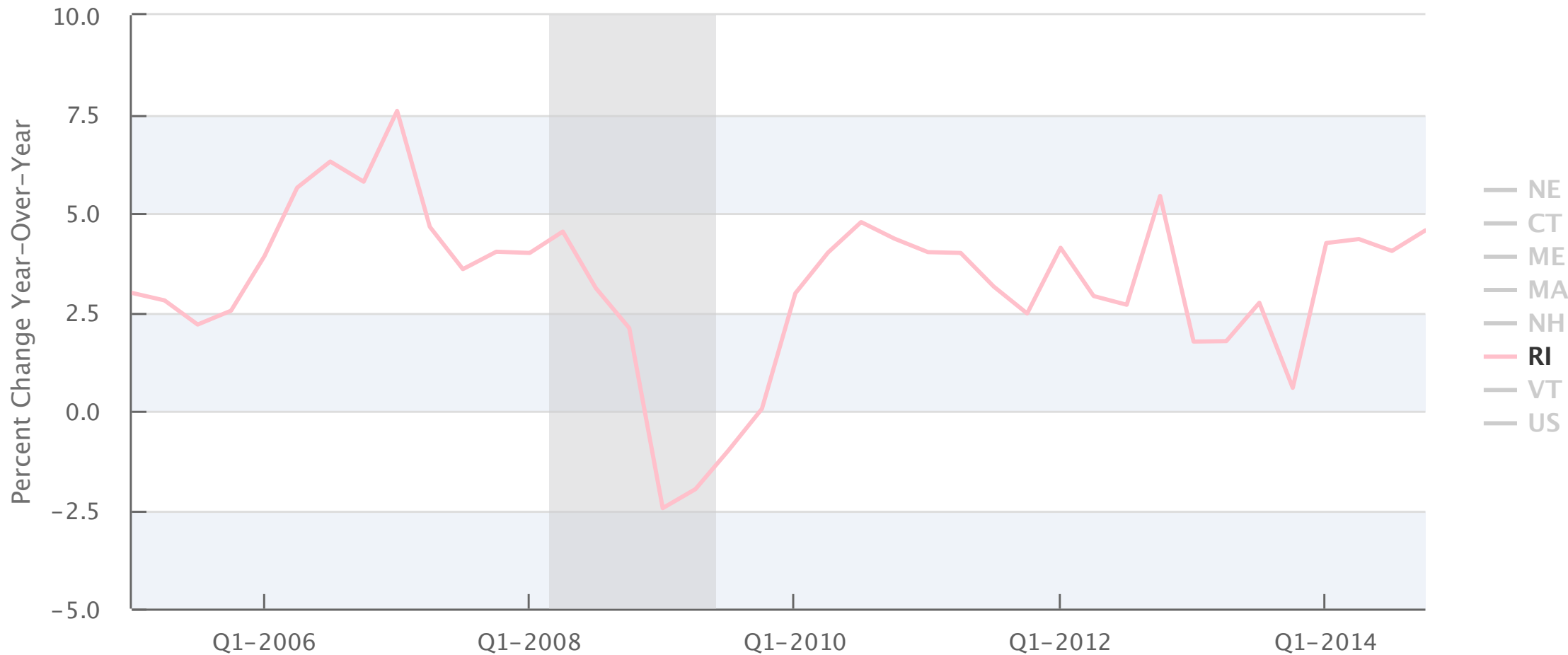
Number of Unemployed



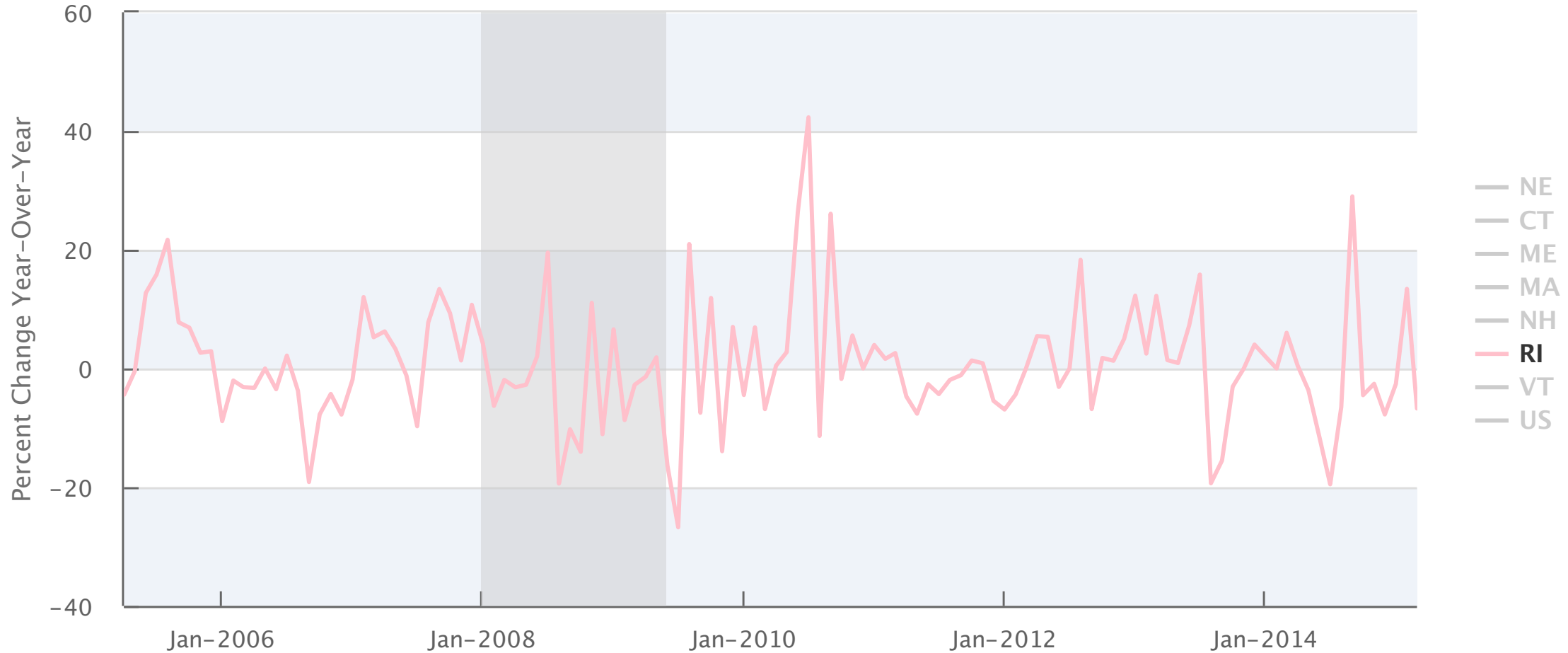
Payroll Employment



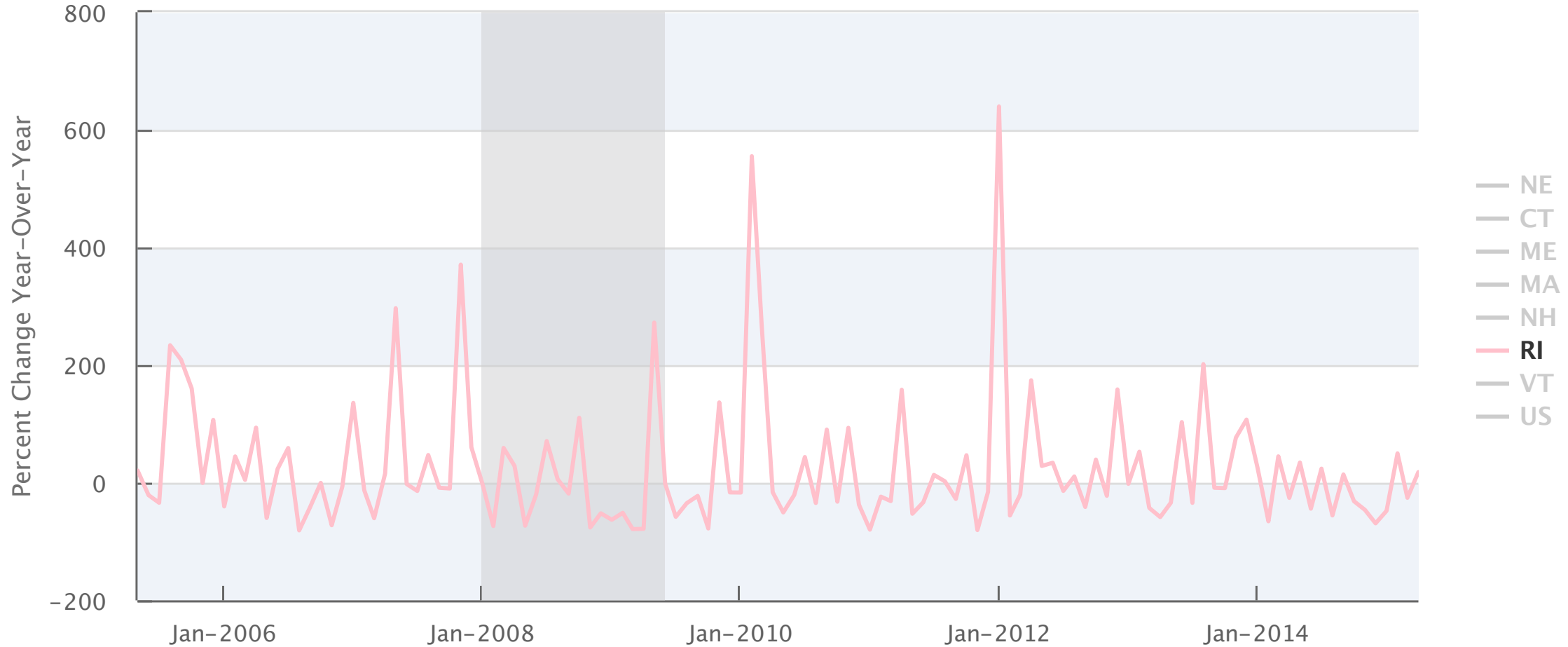
Personal Income



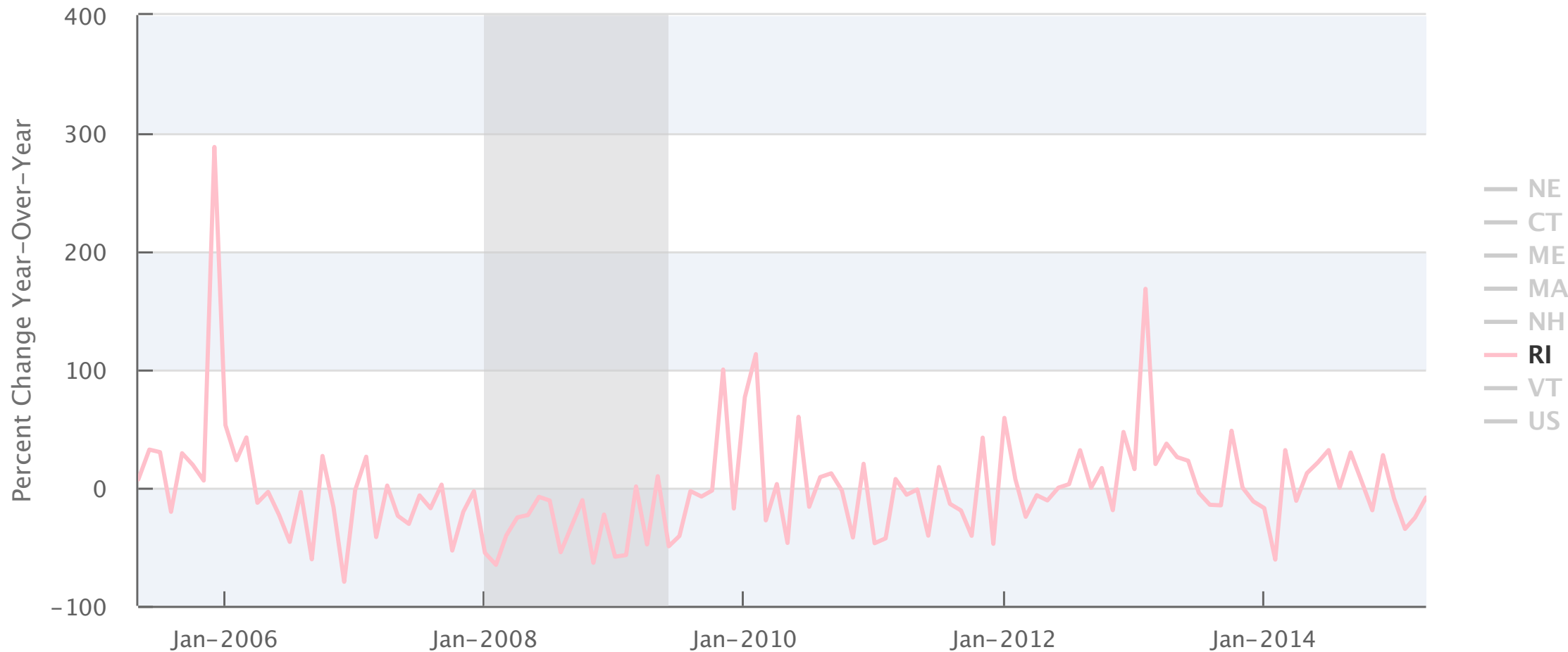
Residential Electricity Sales



Total Contracts



Total



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Cumb. 4-14: [Ref – PWSB's Response to Cumb. 2-34] Is it your view then that it is appropriate to allocate special benefit facilities (distribution pipes, distribution tanks, distribution pump stations, meters and services, etc.) to a wholesale customer?

Response: See response to Cumb 2-18.

Allocation symbol "P" is used as a general allocator for IFR costs. As shown on Sch. 3.1 it is based on a detailed allocation of PWSB's assets. Retail costs associated with metering, services, billing and collection are allocated to those functions and are not allocated to wholesale customers.

As shown on Sch 3.3, distribution costs and associated overhead are deducted from the wholesale costs.

Prepared by: C. Woodcock

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Cumb. 4-15: [Ref – PWSB's Response to Cumb. 2-42] Mr. Woodcock's numbers for wholesale sales (Resale) on Schedule 2.1 still do not match the corresponding numbers on corrected Schedule RB-DR #6 (line 1.d). Converting his number for FY2012 in HCF to MGD does equal 0.45. However, making the same conversions for FY 2013 and FY 2014 produced numbers that are significantly different from those listed on the corrected response to Schedule RB – DR #6. For FY2013 Mr. Benson's number is about 10% higher than Mr. Woodcock's number, and for FY2014 Mr. Benson's number is about 20% higher than Mr. Woodcock's number. Assuming as you state that Mr. Woodcock's numbers are the correct levels of consumption, what is the source of your numbers and/or show how you derived your numbers. Were the corrected numbers for wholesale average day consumption used anywhere in this case to estimate any test year or rate year expenses or revenues (including allocation factors)? If they were, where were they, and will they be corrected? How were the numbers (Wholesale maximum day consumption) on Schedule RB-DR #6 (line 1.e) derived? Given the errors on line 1.d, were the errors carried over to line 1.e? If any numbers on line 1.e are incorrect, provide the correct numbers and show how each was derived/calculated. Were the corrected numbers for wholesale maximum day consumption used anywhere in this case to estimate any test year or rate year expenses or revenues (including allocation factors)? If they were, where were they and will they be corrected?

Response: First, there are no "corresponding" numbers on Mr. Woodcock's Schedule 2.1 and the corrected Schedule RB-DR #6 (line 1.d). Mr. Woodcock's numbers for wholesale sales are actual annual wholesale sales. The numbers on corrected Schedule RB-DR #6 (line 1.d) are for wholesale average day consumption. Mr. Woodcock's numbers are the actual consumption numbers used by Pawtucket for billing purposes. These consumption numbers are recorded by Pawtucket by reading the meters on the first Wednesday of the new month. The numbers reported on DR #6 for lines 1.d and 1.e were requested by the Division subsequent to the filing of this docket, and were provided to Pawtucket by Cumberland. The error on line 1.d in the original schedule was a typographical error. The original RB-DR #6 showed .58 MGD for wholesale average day consumption when it should have

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been .45 MGD. This typographical error was not carried over to line 1.e. The data reported on DR #6 was not used in any calculations for test year or rate year expenses, revenues or allocation factors. Since the data reported on DR #6 is from manual records maintained by Cumberland it is not possible for Pawtucket to reconcile this data to the actual billing records used by Pawtucket for billing purposes.

Prepared by: R. Benson and C. Woodcock

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Cumb. 4-16: [Ref – PWSB's Response to Cumb. 2-47] What was the "undetected error in the spreadsheet?" Also identify where the error occurred on the spreadsheet and show how it affected the whole spreadsheet after it was corrected. Include in your response a copy of the revised/corrected Schedule RB-07. Please provide all assumptions, calculations and supporting documents used to derive each of the monthly estimates (FY16 Budget) provided in your response to Cumb. 2-47. This should also include a similar monthly computation of the FY2015 Budget estimate that matches the bottom line amount for that year on the corrected Schedule that should be provided as part of your response. How will this correction (and others on this Schedule, if any) affect the levels of increases in rate revenue requirements proposed in your filing for each of the three projected rate years (FY 2016 through FY2018)?

Response: See the revised schedule submitted with the response to Cumb 3-26. The excel spreadsheet provides the revised DBO cost amounts for FY15 and FY16. It includes all formulas used to calculate the fiscal year amounts. The "undetected error on the original schedule was a duplicate entry of \$159,163 for the month of March in the totaling of the projected expense for the FY16 budget. Once this duplicate entry was removed from the spreadsheet it reduced the budget amount for FY16 to \$1,923,121. See the response to Cumb 2-47. The response to Cumb 3-26 provides the revised FY16 budget for the DBO costs. The rate year costs were also increased by 3.08% for FY17 and FY18. See Woodcock 12.0. The savings are: \$182,966 for FY16, \$188,601 for FY17 and \$194,410 for FY18.

Prepared by: R. Benson

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CERTIFICATION

I hereby certify that on June 11, 2015, I sent a copy of the within to all parties set forth on the attached Service List by electronic mail and copies to Luly Massaro, Commission Clerk, by electronic mail and regular mail.

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